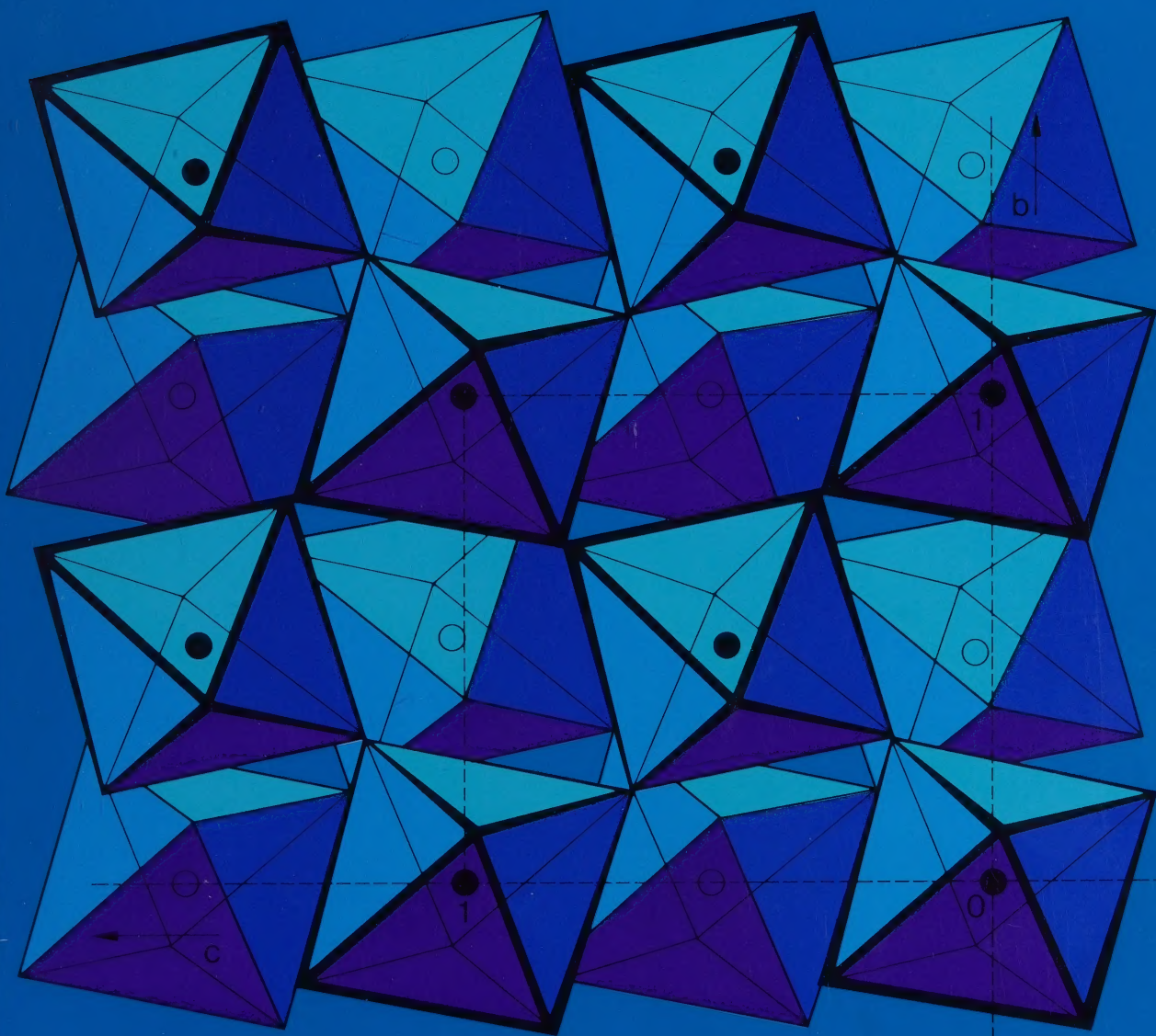


Annual Report 1980

AR50



BASF

At a Glance

IN MILLION DM	1978	1979	1980
BASF World Sales	23,254	28,022	29,991
BASF Group			
Sales	21,513	25,896	27,731
Net income (after taxes and minority interests)	421	619	359
– per share in DM	10.86	15.71	8.98
– in percent of sales	2.0	2.4	1.3
Capital expenditures on tangible fixed assets	1,757	1,811	1,841
Depreciation of tangible fixed assets	1,451	1,628	1,592
Number of employees	115,408	117,168	116,518
BASF Aktiengesellschaft			
Sales	9,680	12,134	12,491
Net income (after taxes)	271	405	330
– per share in DM	7.00	10.27	8.25
– in percent of sales	2.8	3.3	2.6
Dividend payout	233	315	280
– per share in DM	6.00	8.00	7.00
Capital expenditures on tangible fixed assets	884	887	811
Depreciation of tangible fixed assets	638	777	764
Number of employees	52,318	52,515	52,312

BASF world sales represent the total consolidated net sales of all companies in the BASF Group.

The BASF Group takes into account BASF Aktiengesellschaft and all companies which are directly or indirectly at least 50 percent owned by BASF Aktiengesellschaft and which are consolidated.

The Group accounting includes majority holdings in full, and half of the 50 percent participations and their majority holdings. Group companies of minor importance are not consolidated.

STRUCTURE OF BASF

	BASF world, 292 companies Sales: DM 29.99 billion
	BASF Group, 113 companies Sales: DM 27.73 billion
	BASF Aktiengesellschaft and Consolidated German Subsidiaries, 34 companies Sales: DM 21.74 billion
	BASF Aktiengesellschaft Sales: DM 12.49 billion

Cover: Schematic representation of the crystal structure of telluric acid, H_2TeO_4 .

Printed in West Germany

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BASF Aktiengesellschaft
D-6700 Ludwigshafen
West Germany

BASF



Members of the Board of Executive Directors (l. to r.): Dr. Hans Moell, Deputy Chairman, Professor Dr. Matthias Seefelder, Chairman, and Dr. Ernst Denzel, at a press conference.

At best, precautionary measures can only provide limited protection against such abrupt economic fluctuations as experienced in 1980. To be sure our balanced production program, our broad spectrum of products and our worldwide business activities help to mitigate the impact of severe downturns. On the strength of our strategically planned investments and our intensive efforts in research and development, we are prepared to capitalize successfully on business opportunities now and in the future.

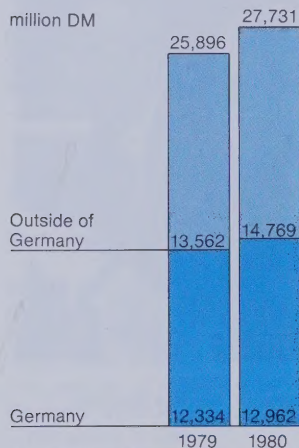
M. Seefelder

Chairman

Report of the Board of Executive Directors Business in 1980

BASF GROUP SALES

million DM



Erratic business pace

Business in 1980 was characterized by a sharp downturn in chemicals as the ultimate result of the substantial rise of oil and gas prices.

Following a particularly good first quarter, which built on the pace set in 1979, sales decreased from month to month. In the summer the seasonal lull, a declining economy and the reduction of inventories by customers combined to bring business to a low not experienced in recent years. The slight recovery in the fall continued very hesitantly until the end of the year.

Higher costs burdened earnings

The rise in raw material and energy costs forced price increases. Yet, as a result of intensified competition during the downswing, the higher costs could only be recovered partially. Competitors who operated with less of a raw material cost burden put additional pressures on prices. Overall, sales increased, but the volume declined. Lower utilization of plant capacities resulted in higher unit costs. Accordingly, earnings receded more sharply than volume.

Impact on operation varied

The weakness in the economy depressed particularly operations in refineries, fiber raw materials as well as pigments and auxiliaries. Hard pressed among the plastics were the commodities whose prices suffered the pressure of unusually severe competition for market shares. As one of the major plastics producers we were particularly affected.

In other business sectors we also experienced, in addition to successes, considerable difficulties. Overall, earnings decreased. That applies to information systems, intermediates, industrial chemicals, dyestuffs, textile chemicals, specialty plastics and basic chemicals.

On the other hand, fertilizers, potash and salts, dispersions and pharmaceuticals developed favorably. Coatings benefited from long-term programs to institute structural improvements and to decrease costs. In fine chemicals we expanded our market position substantially with the acquisition of Fritzsche Dodge & Olcott, a U.S.-based producer of fragrances and flavors.

Business abroad did not compensate for lag at home

Business outside of Germany did not compensate for the domestic decline in volume. Suppliers based outside of Europe capitalized on their raw material cost advantages, primarily in sales of commodities in foreign markets.

In Europe, outside of Germany, sales again reached the preceding year's level; recessionary trends varied markedly from country to country or in point of time of their occurrence. Our companies in North America were also confronted by a recession. Due to its product range BASF Wyandotte Corporation was particularly affected. The combination of a decline of business and measures instituted for structural adjustments led to a loss. In Brazil, our foremost Latin American market, our affiliates succeeded in achieving rather favorable results despite local economic difficulties. Sales in Africa, Asia and Australia advanced.

BASF Group sales totaled DM 27.7 billion

Sales of the BASF Group increased 7.1 percent to DM 27,731 million; sales in Germany were 5.1 percent higher than a year earlier and sales outside the Federal Republic 8.9 percent greater. Affiliates outside of Germany increased their sales of products manufactured domestically by 9.8 percent to DM 6,801 million. Earnings before taxes and minority interests declined 25.4 percent to DM 1,271 million. Earnings after taxes and minority interests totaled DM 359 million, a decrease of 42.0 percent compared to the preceding year.

BASF Aktiengesellschaft

BASF Aktiengesellschaft achieved sales of DM 12,491 million or 2.9 percent more than in the previous year. Exports represented 56.7 percent of sales, a slight gain of 0.3 percent compared to the previous year. Pre-tax earnings decreased by 25.2 percent to DM 744 million. After-tax earnings totaled DM 330 million, a decline of 18.5 percent compared to the previous year. DM 50 million were transferred to the free reserve to provide the company's equity capital position with added strength.

Proposed dividend

The profit available for dividend of BASF Aktiengesellschaft totaled DM 280 million. We are proposing the distribution of a dividend of DM 7.00 per share to the Annual Meeting.

Outlook

The signs of recovery in the first months of 1981 do not yet portend a basic turn-around. Competition in international chemical markets continues to intensify. By increasing exports many countries are trying to offset their balance-of-payments deficits swollen by rising energy and raw material costs. Subsidy programs and other government supports, adopted by some countries, distort competition. Oil-producing countries seek to penetrate chemical markets.

In view of these developments it is essential to strengthen our competitiveness. To this end we have applied our resources in the past and will continue to devote our efforts in the future. Our principal objectives are to secure the supply of raw materials, to expand production of intermediates further, to strengthen operations in knowhow-intensive processes and chemical products with high value-added content as well as to increase our involvement in selected consumer-oriented markets. We are countering the rising cost pressures with a diversified and effective program of efficiency measures.

SALES AND EARNINGS

million DM

BASF GROUP	1979	1980
Sales	25,896	27,731
Earnings before income taxes	1,703	1,271
Income taxes ¹	1,067	891
Minority interests	17	21
Net income	619	359
BASF AKTIENGESELLSCHAFT		
Sales	12,134	12,491
– Germany	5,293	5,412
– Exports	6,841	7,079
Earnings before taxes	994	744
Taxes ²	589	414
Net income	405	330
Appropriation of net income		
Dividend	315	280
Transferred to reserves	90	50

¹ principally corporation and trade profit taxes.

² taxes on income, profit and property (trade, payroll, corporation, real estate, property taxes) and Equalization of Burdens Property Tax.

BASF GROUP SALES BY OPERATION

million DM	1979	1980
Raw Materials and Energy	5,381	6,124
Chemicals	4,929	5,240
Agricultural Chemicals	4,214	4,668
Plastics	4,718	4,649
Dyestuffs and Finishing Products	3,664	3,879
Consumer Products	2,990	3,171
	25,896	27,731

The unsatisfactory development of business is also reflected in the flow of funds. The persistent rise in raw material prices led to a further increase in inventories. The additional application of funds in current assets was, however, lower than the increase in the preceding year. The advance in total sales exceeded the growth of total assets of the BASF Group as well as BASF Aktiengesellschaft.

BASF Group

Due to lower earnings internally generated funds decreased by DM 283 million. Nevertheless it was possible to finance not only the capital expenditures in tangible and other fixed assets entirely from internal sources, although these outlays were DM 190 million higher, but also part of the increase in current assets.

Inventories and receivables expanded. While, compared to the previous year, the financial requirements for inventories increased, the rise in receivables was considerably lower. The part of capital requirements not covered by internally generated funds was mainly financed by expanded current liabilities and accruals.

Liabilities to banks and the capital market increased from DM 2,085 million to DM 2,198 million. Equity, including minority interests and half of the special reserves, declined slightly – expressed as a percentage of total assets – from 41.6 to 40.4 percent. The current ratio and long-term financing ratio improved to some extent.

BASF Aktiengesellschaft

Although earnings were lower, internally generated funds increased slightly. This was due to higher depreciation and retirements, affected in part by the sale of our holding in Röhm GmbH.

Here, too, we were able to finance capital expenditures in tangible and other fixed assets by internally generated funds. The financial requirements due to increased inventories and receivables were notably lower than in the previous year and mainly covered by the reduction of cash and cash items. While long-term liabilities increased, short-term liabilities could be reduced by DM 151 million. Liabilities to banks and the capital market decreased from DM 427 million to DM 369 million.

BASF GROUP SOURCE AND APPLICATION OF FUNDS

million DM	1979	1980		1979	1980
SOURCE OF FUNDS			APPLICATION OF FUNDS		
Net income	619	359	Additions to tangible fixed assets	1,811	1,841
Depreciation and retirement of fixed assets ¹	1,817	2,155	Change in investments and other additions ²	141	301
Other items ³	690	329	ADDITIONS TO FIXED ASSETS		
CASH FLOW minus dividend of BASF Aktiengesellschaft of the preceding year	3,126	2,843		1,952	2,142
INTERNAL FINANCING	2,893	2,528	Change in inventories	632	697
Increase in paid-in capital, incl. premium on par value	90	67	Change in receivables	576	393
Bonds, promissory notes issued	96	21	CHANGE IN CURRENT ASSETS (without cash and cash items)		
Bonds, promissory notes redeemed ⁴	(224)	(210)		1,208	1,090
Other changes in long-term liabilities	(24)	88	INCREASE IN CASH AND CASH ITEMS		
Change in short-term liabilities and accruals	495	547		155	—
EXTERNAL FINANCING	433	513			
Other changes	(11)	(2)			
DECREASE IN CASH AND CASH ITEMS	—	193			
	3,315	3,232		3,315	3,232

STRUCTURE OF ASSETS AND LIABILITIES IN 1980

	million DM	%		million DM	%
ASSETS			CAPITAL AND LIABILITIES		
Tangible fixed assets, concessions, patents, and similar rights	7,826	42.8	Paid-in capital	3,842	21.0
Investments and long-term loans	683	3.7	Earned surplus	3,019	16.5
FIXED ASSETS	8,509	46.5	EQUITY CAPITAL	6,861	37.5
Inventories	4,603	25.2	Minority interests	132	0.7
Receivables	4,234	23.1	Balance arising from consolidation	45	0.3
Cash and cash items	670	3.7	Special reserves	698	3.8
CURRENT ASSETS	9,507	52.0	Long-term liabilities	5,142	28.1
Deferred charges and prepaid expenses	266	1.5	Short-term liabilities	5,404	29.6
TOTAL ASSETS	18,282	100.0	TOTAL LIABILITIES	10,546	57.7
			TOTAL CAPITAL AND LIABILITIES	18,282	100.0

¹ including depreciation and retirement of deferred charges and balance arising from consolidation

² including additions to non-current assets due to newly-acquired, consolidated companies (in 1980 the Fritzsche Dodge & Olcott group in particular) and additions to deferred charges and intangible assets

³ essentially changes in long-term provisions and special reserves

⁴ including the portions shown under short-term liabilities

BASF AKTIENGESELLSCHAFT
SOURCE AND APPLICATION OF FUNDS

million DM	1979	1980		1979	1980
SOURCE OF FUNDS			APPLICATION OF FUNDS		
Net income	405	330	Additions to tangible fixed assets	887	811
Depreciation and retirement of fixed assets	878	1,118	Investments in affiliated companies and change in loans	85	414
Other items ¹	268	135			
CASH FLOW	1,551	1,583	ADDITIONS TO FIXED ASSETS	972	1,225
minus dividend of the preceding year	233	315	Change in inventories	402	130
INTERNAL FINANCING	1,318	1,268	Change in receivables	399	93
Increase in equity capital, incl. premium on par value	90	67	CHANGE IN CURRENT ASSETS	801	223
Bonds, debentures redeemed	(139)	(32)	(excluding cash and cash items)		
Change in long-term liabilities	78	51	INCREASE IN CASH AND CASH ITEMS	240	-
Change in short-term liabilities and accruals	666	(151)			
EXTERNAL FINANCING	695	(65)			
DECREASE IN CASH AND CASH ITEMS	-	245			
	2,013	1,448		2,013	1,448

STRUCTURE OF ASSETS AND LIABILITIES IN 1980

	million DM	%		million DM	%
ASSETS			CAPITAL AND LIABILITIES		
Tangible fixed assets	3,255	31.6	Capital stock	1,998	19.4
Investments and long-term loans	2,904	28.2	Surplus reserves plus profit available for dividend	3,066	29.8
FIXED ASSETS	6,159	59.8	EQUITY CAPITAL	5,064	49.2
Inventories	1,804	17.5	Special reserves	219	2.1
Receivables	1,990	19.4	Valuation adjustments	51	0.5
Cash and cash items	340	3.3	Long-term liabilities	2,572	25.0
CURRENT ASSETS	4,134	40.2	Short-term liabilities	2,387	23.2
			TOTAL LIABILITIES	4,959	48.2
TOTAL ASSETS	10,293	100.0	TOTAL CAPITAL AND LIABILITIES	10,293	100.0

¹ change in long-term provisions and special reserves minus valuation adjustments

Total assets and the percentage of equity capital in total assets remained nearly unchanged. The equity capital, including half of the special reserves, represents 50.3 percent of total assets.

Financial Ratios

BASF GROUP

Acid-test ratio	0.9
short-term receivables plus cash and cash items:	
short-term liabilities	
Current ratio	1.7
current assets:	
short-term liabilities	
Long-term financing ratio	1.5
long-term capital:	
non-current assets	

BASF AKTIENGESELLSCHAFT

Acid-test ratio	0.8
short-term receivables plus cash and cash items:	
short-term liabilities	
Current ratio	1.5
current assets:	
short-term liabilities	
Long-term financing ratio	1.2
long-term capital:	
non-current assets	

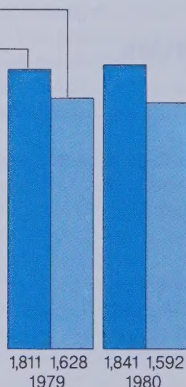
Capital Expenditures

BASF GROUP CAPITAL EXPENDITURES AND DEPRECIATION

million DM

Depreciation

Capital
Expenditures



Large capital expenditure programs continued

Despite the unsatisfactory development of earnings, the capital expenditure programs proceeded on schedule. The BASF Group invested DM 1,841 million in tangible fixed assets, 1.7 percent more than in the previous year. Of this total the largest share, DM 1,234 million or 67.0 percent, was again spent in Germany, including DM 811 million by BASF Aktiengesellschaft. In addition DM 176 million or 9.6 percent were invested in other European countries. Expenditures for tangible fixed assets outside of Europe increased 23.4 percent to DM 431 million, of which the U.S. accounted for DM 340 million.

Our increased allocations to countries outside of Germany are designed to service these markets on a long-term basis.

The capital expenditure activities were principally aimed to assure the supply of raw materials, to establish a strong captive supply position in basic feedstocks and to strengthen knowhow-intensive operations and chemical products with high value-added content. These commitments represent our response to the brisker competition expected in the chemical marketplace.

Of the total expenditures 58 percent were spent for new plants and capacity expansions, 33 percent for replacements of plants and equipment and 9 percent for efficiency improvements. All of the allocations include outlays for environmental protection, which again accounted for 7 percent of the total capital expenditures. Significant projects are detailed under "Operations".

At the Ludwigshafen works Steamcracker II came on stream. It processes one million metric tons of naphtha per year into major basic chemicals like ethylene and propylene. It thus contributes decisively to securing the feedstock supply for our production facilities. Almost half the cracker's raw material requirements are supplied by the Mannheim refinery, a Group affiliate.





Research and Development

R + D secures our future

In the year under report, DM 993 million were expended for research and development, of which BASF Aktiengesellschaft accounted for DM 745 million. An additional DM 147 million was invested in research facilities and pilot plants. Research programs focused on broadening our raw material base, developing highly sophisticated products and improving the performance and profitability of our production processes.

At year-end, more than 10,000 employees, of whom about 1,700 hold university degrees in sciences, were active in our research and development laboratories.

Optimizing use of feedstocks

In 1980 feedstocks accounted for 39 percent of the total production costs of BASF Aktiengesellschaft, energy costs for 13 percent. For this reason we have intensified our efforts to develop more efficient catalysts or energy-saving processes in order to achieve better utilization of starting materials. In the year under report, a new catalyst system for the production of ethylene oxide from ethylene achieved higher yields. The application of energy-saving programs to a number of production processes resulted in improved profitability.

We are working on methods for the utilization of oil fractions heretofore unsuitable for the production of basic chemicals. Programs for the production of petrochemicals out of methanol, that could also be obtained from coal, were continued.

Together with Saarbergwerke AG we developed a process to utilize the oil produced from bituminous coal in a pilot plant in the Saar region.





Biotechnology opens new opportunities for syntheses

Started several years ago, biotechnology research concentrates on the development of highly sophisticated products. Special emphasis is devoted to the synthesis of optically active intermediates and additions to our vitamin line. Overall we expect these methods to yield new types of syntheses for complicated chemical compounds which, using traditional approaches, are not accessible or lack profitability. To expand biotechnology research activities we are constructing a new laboratory and pilot plant building, scheduled for completion in 1982.

Research leads to new areas of entrepreneurial activity

In the year under review we consolidated our activities in animal feed, human nutrition, fragrances and flavors as well as cosmetics into a new operating division. Its business is essentially based on research conducted for many years. For example, our strong position in vitamins is rooted in our basic development work that was later extended to fragrances and flavors. Another new operating division is engaged in the application of new technologies for certain types of semi-finished and finished plastics parts. Here, too, activities formerly conducted separately have been consolidated in order to use our extensive experience in the production and application of engineering plastics more effectively.

The efforts to develop foamed plastics for thermal insulation with grades offering greater flame retardancy were pursued energetically. The crystal-clear, impact-resistant polystyrene-based engineering material, introduced at the K'79 international plastics fair, will be manufactured by a new production process shortly.

A new laboratory designed primarily to solve application problems with coatings was put into operation in Muenster, Westphalia.

As in preceding years, the BASF Group collected more in license fees than it paid. Income from licenses totaled DM 44 million, while royalty payments amounted to DM 21 million.

Specific research results are highlighted under "Operations".

Growth regulators for cereals, such as Cycocel® and Terpal®, affect the length, strength and stability of the stems and thus help prevent lower yields due to lodging. In a laboratory the internode length is measured.

Employees

BASF GROUP PERSONNEL

Employees of whom in	117,168	116,518
Affiliates outside of Germany	29,780	29,145
Affiliates in Germany	34,873	35,061
BASF Aktiengesellschaft	52,515	52,312
	1979	1980

116,518 people work for the BASF Group

In 1980 the number of BASF Group employees in Europe did not change compared to a year earlier. Employment decreased in the U.S. due to the structural adjustments at BASF Wyandotte Corporation.

52,312 BASF Aktiengesellschaft employees

The workforce of BASF Aktiengesellschaft declined by 0.4 percent. Employee turnover increased by 0.5 percent to 6.8 percent. At 6.4 percent the share of foreign workers in the total workforce remained almost unchanged. The number of hours worked dipped by 0.3 percent in 1980 compared to the previous year. The average number of hours worked annually per employee decreased from 1,633 to 1,627 hours, primarily as a result of the right to longer vacations and a contractual reduction of hours worked in the round-the-clock two-shift system. Overtime, as a percentage of the contractual hours worked, decreased to 0.6 percent, the lowest level since 1952.

Wages and salaries of the BASF Group total DM 4.8 billion

A total of DM 4,825 million was paid out for salaries and wages, 5.7 percent more than a year earlier. Social security contributions rose by 4.3 percent. Expenses for pensions and old-age assistance were 1.9 percent higher in reaching DM 501 million.

BASF Aktiengesellschaft spent DM 2,437 million for wages and salaries. Compulsory social security contributions were 5.9 percent greater. In keeping with the three-year adjustment cycle for company pensions, which resulted in substantially increased payments in the previous year, expenses for old-age pensions and assistance decreased 13.6 percent.

23,175 former employees of BASF Aktiengesellschaft or their dependents receive benefits under the company's pension plan.

Even more trainees in 1980

In the year under review our German companies again accepted more trainees than required for our operations. Altogether 2,045 young people were enrolled for training. By the end of the year, more than 5,636 young people were employed in training programs for more than 60 trades.

Vacancies are primarily offered to trainees. Altogether 1,351 young people stayed upon completion of their training.

BASF Aktiengesellschaft accepted 1,315 trainees. Of the altogether 3,843 trainees, about two-thirds participated in training programs for crafts or technical professions. Trainees accounted for 7.3 percent of the total workforce, a level exceeding the average of the chemical industry and German industry as a whole.

As in the preceding year, barely half of the places offered in training programs for young people who failed to complete their basic schooling could be filled. Working in cooperation with the Chamber of Commerce and the Federal Labor Office we started in the fall of 1980 a program to enhance the professional and social standing of young foreigners.

Special emphasis continued to be placed on employee advancement. In 1980, more than 20,000 employees participated in internal and external seminars which, in addition to professional development, focus on training in leadership skills and the interaction of managerial and economic policies.

In 1980, the BASF Group spent DM 186 million for training and professional development.



Greater employee interest in company shares

Compared to the previous year, an even larger number of employees of BASF Aktiengesellschaft and of the German majority-owned affiliates have been able to acquire shares in the company as part of their annual bonus. Altogether they purchased stock with a total nominal value of DM 42.7 million.

97 percent of the non-exempt employees, covered by the German law promoting the formation of personal assets, exercised their right and saved a total of DM 51 million. Exempt employees, not covered by the law, were again offered the opportunity to buy 7 BASF shares with a selling restriction of 5 years at a price of DM 45 each. The price for the 49,859 shares acquired for this purpose totaled DM 6,687,439, including commissions.

BASF Group health care

Employee health care is a priority in all BASF Group companies. Almost all employ plant physicians, or have physicians under contract, and provide medical facilities. More than 170 of our physicians maintain constant contact in order to provide employees up-to-date health care.

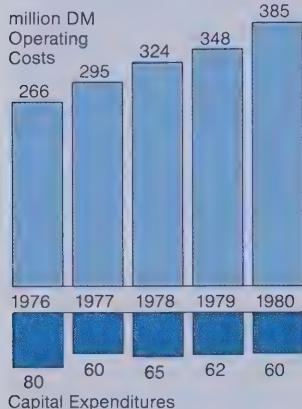
Appreciation of employee performance

We thank all employees in the BASF Group for their performance and willingness to contribute to the company's success and also the employee representatives for their cooperation in solving problems of mutual interest.

The new BASF recuperation center in Westerland on the island of Sylt in the North Sea offers employees the opportunity to improve their health through participation in sports and recreation. The center accommodates 128 employees. During vacation periods it is also open to BASF families. A swimming pool is installed under the roof. The former BASF facility at the site provided respite for 11,000 employees during its 25 years of existence.

Environmental Protection and Safety

BASF AKTIENGESELLSCHAFT ENVIRONMENTAL PROTECTION



Accidents decline

In keeping with our unrelenting accident prevention efforts, we also conduct safety contests in all Group companies.

Undoubtedly a new contest, introduced in 1980 at the Ludwigshafen complex, contributed significantly to a more than 20 percent reduction in the number of on-the-job accidents. Concurrently we started a special program to lower accidents incurred in commuting. Signs of success are already evident. While in each of the 5 preceding years the number of accidents suffered in commuting to and from the Ludwigshafen complex remained almost equally high, a distinct improvement was noted in 1980.

Sludge treatment improved

From the outset we have responded to the needs of environmental protection. In part these efforts focused on keeping water clean. The biological effluent treatment plant for the Ludwigshafen complex, which was built at considerable expense to incorporate the most modern technology, has fulfilled all requirements. In constant pursuit of further improvements we have now been concentrating on sludge dewatering and utilization. Using our own technology the sludge is converted into filter cake. Similar to brown coal, it can be burned in industrial furnaces.

The volume of air exchange in the open, biologically active treatment plant presented a problem. Special covers for the aerators in the Ludwigshafen effluent plant decreased the air exchange considerably. As a result mist has been eliminated and odors reduced.



For given periods of time employees in production carry small devices which have been perfected to record more accurately than heretofore the presence and, if so, the concentration of chemical substances at the workplace. The devices supplement the findings of stationary analysers and periodic controls that provide constant surveillance of the ambient air. In operation the device takes metered samples of the surrounding air and retains these with the aid of activated charcoal. Subsequent laboratory analyses then furnish information on the nature and degree of any air contamination.

Right: The new steamcracker in the Ludwigshafen complex operates with both a ground and a tower flare to burn offgases safely. The ground flare suffices for scheduled startups and shutdowns. The tower flare, shown during construction, becomes only active when problems produce bigger gas volumes. The flare design incorporates a process developed by BASF engineers.



Operations Raw Materials and Energy

Wintershall AG and some of its affiliates are active in crude oil and natural gas production as well as refining. Bituminous coal is produced by the Gewerkschaft Auguste Victoria mine. These companies contribute importantly to meeting the needs of the BASF Group for raw materials, energy and basic chemicals by supplying petroleum products such as heavy fuel oil, naphtha, benzene and cyclohexane as well as natural gas and coal. Since cost increases could not be fully recovered, earnings from merchant sales deteriorated compared to the previous year. Sales rose to DM 6.1 billion and represented 22.1 percent of the BASF Group sales.

Oil and gas

Crude oil production was higher by 2 percent and totaled 2.26 million metric tons. Output outside the Federal Republic increased by 5 percent to 1.54 million metric tons. In Germany, additional costly secondary and tertiary exploitation measures minimized the natural depletion. Together with the start-up of a new oil field in Aitingen, Bavaria, it was therefore possible to limit the reduction in output to barely 3 percent, compared to the previous year, and produce altogether 0.72 million metric tons.

Natural gas output totaled 1.79 billion cubic meters. The decrease of 14 percent compared to the previous year was attributable to lower consumption. The reduction involved mainly German fields. Production outside of Germany reached 403 million cubic meters, close to the 1979 volume.

Exploration intensified

Efforts to develop additional crude oil and natural gas deposits were intensified by operating within consortia in Germany and abroad. We hold 50 percent participations in an oil find off the German North Sea coast and in the "Schwedeneck" oil field, discovered in the Baltic Sea last year; production is scheduled for start-up in 1983. In the year under report a notable natural gas deposit was found in Soehlingen near Bremen. We own a 10 percent share.

The huge natural gas field off the coast of Qatar was confirmed by an additional test well. The field extends into the concession of Wintershall AG. Negotiations are in progress for the exploitation of this field. Production at the Prinos oil field and the neighboring Kavalla gas field in the Aegean Sea will begin within the first six months of 1981.

DEMINEX – Deutsche Erdölversorgungsgesellschaft mbH – in which Wintershall holds an 18.5 percent interest, continued its development and production activities according to plan. The search for oil in the North Sea and the Gulf of Suez was successful. New fields for exploration were acquired in the North Sea, Brazil, Indonesia and Angola.

In spite of the military conflicts in the Middle East oil was on the whole plentiful in supply. Prices, however, escalated drastically. The average price per metric ton of crude, free German border, rose by DM 178 to DM 456 in the course of 1980 and reached DM 610 in the spring of 1981.

Refinery utilization declined

For the first time since 1977 consumption of petroleum products abated. Of the various products, only automotive fuels advanced slightly, while business in light and heavy fuel oils fell off markedly. Hesitant price adjustments for refined products to higher crude costs combined with lower consumption of petroleum products resulted in a substantially reduced throughput in the refineries in Germany.

Our Mannheim refinery was particularly affected. The plant is designed to produce a relatively high share of fuel oil. Its capacity utilization dropped to almost 50 percent. To remedy this unsatisfactory situation, we started to plan a restructuring program. The Lingen refinery with its modern conversion facilities operated, however, at 79 percent of capacity. The Salzbergen lubricants refinery was fully utilized throughout the year due to high demand for lubricants and specialties. On the whole our refineries operated at 65 percent of capacity and thus at the average level attained by refineries in the Federal Republic.

Capital expenditures were primarily devoted to the further development of fields in Libya and Oman-Butabul, to wells being drilled in Germany and abroad as well as to the completion of the "Düste III" gas purification plant. DM 131 million were spent for oil and gas exploration in and outside of the Federal Republic.

As of November 1, 1980 the production levies for crude and natural gas from German deposits were raised from 17 to 22 percent. This regulation will be in force until the new German mining law becomes effective January 1, 1982.

At the Prinos oil field and the South Kavalla gas field, located in the North Aegean Sea, some 20 kilometers off the Greek coast, drilling for production wells neared completion for the start of full operations in mid-1981.



Improved utilization of energy

The supply of energy to our production plants was impacted by the escalating prices for primary energy. We seized every opportunity to minimize the cost burden.

Flexibility in using primary energy

Generating plants equipped to burn various fuels were switched to the primary energy available at lowest cost. More use of coal at the Ludwigshafen works reduced fuel oil consumption by 15 percent.

Greater energy savings

Steadfastly we pursued our long-term programs to save energy. Capital expenditures in small and medium-sized projects will achieve even greater savings in energy consumption in subsequent years.

Within total steam production the share of steam fueled by excess heat from production processes rose by 3 percent to 36 percent in the Ludwigshafen works in 1980. By 1986 we expect to tap about 50 percent by utilizing excess heat from the steam-cracker as well as other sources. At the Antwerp works we are striving to achieve about 40 percent utilization within the same period.





Higher bituminous coal output
The Gewerkschaft Auguste Victoria mine produced 3.03 million metric tons of bituminous coal in 1980, a record volume since 1965. The entire output was sold. 42 percent were supplied to the adjacent utility, BASF Kraftwerk Marl, and the Ludwigshafen works. The program launched in 1975, to develop deposits in adjacent reserves was continued. Based on current assessments, the deposit can be expected to meet all prerequisites for coal production on a long-term basis.

Modern production methods practiced at our Auguste Victoria bituminous coal mine include hydraulically operated shields to protect the miner in the workplace, shown here with a coal plow in a narrow seam.

Agricultural Chemicals

The broad selection of liquid and solid one-component, multi-component and special fertilizers as well as the multifaceted line of crop protection products put us in the forefront of manufacturers of products for the farm.

Business in fertilizers and potash, prompted by brisk demand, developed favorably. Adverse weather conditions impaired the volume of crop protection products sold. Sales in this sector totaled DM 4.7 billion or 16.8 percent of BASF Group sales.

Fertilizer business favorable

In the year under review business in nitrogenous fertilizers developed favorably, particularly in the Federal Republic. Thus our plants operated at high capacities throughout the year. Exports to overseas countries were satisfactory.

In Germany sales of phosphorous fertilizers and grades containing potash also grew in volume.

Prices of all major raw materials rose substantially in the year under report and forced adjustments in fertilizer prices.

Specialties for the care of plants in home and garden are largely made by Compo GmbH, Muenster-Handorf, an affiliate. Business continued to gain despite growing competition in the year under report. In European countries, outside of Germany, we are winning larger market shares. To enhance our competitive position, development work in this sector was intensified at the Limburgerhof agricultural testing station.

Mineral feed additives were particularly affected by escalating raw material prices. In spite of the necessary price adjustments we succeeded in maintaining the volume of sales at the preceding year's level. Specialties fared relatively well.

Capital expenditures in 1980 concentrated on the Antwerp site, where in addition to a plant for the production of nitric acid, another for the manufacture of nitrogenous one-component fertilizers went on stream.

Good market for potash and salts

Conditions in the potash market were again advantageous. While consumption in West Europe and North America decreased slightly compared to the previous year, demand was distinctly stronger in other major markets. Overall, the world potash output moved somewhat ahead of the volume sold.

Business at Kali und Salz AG was generally good. Potash shipments in Germany almost attained the preceding year's volume. Exports were again higher.

Although, due to substantially lower demand for road salts, rock salt shipments fell distinctly short of the particularly favorable level of the previous year, they nevertheless achieved an above-average volume. Thomaskali® shipments were

slightly higher than in 1979. Sales of magnesium compounds did not quite match the preceding year's level.

In total, sales of Kali und Salz AG increased 8.7 percent to DM 1,395 million.

Long-term programs for restructuring of the potash works along the Werra River proceeded according to plan. They also provide for the expansion of the dry separation processes for rock salts and the addition of production facilities for specialties. Other capital expenditures were undertaken to improve the energy supply and to secure rock salt resources.

Through an affiliate Kali und Salz AG acquired a 20 percent participation in a new potash project in New Brunswick, an East Canadian province. Following the successful completion of development work, a new potash plant is to be erected there within two years.

Crop protection sales varied geographically

On the whole business in crop protection products developed satisfactorily in the year under report. However, in Western Europe, in particular, where inclement weather prevailed, business failed to meet expectations. Overseas, business expanded. This applies in particular to Basagran®, a herbicide applied to soybeans, rice, peanuts and cereals. The production plants at the Ludwigshafen works and at the Geismar site in the U.S. operated at full capacity. Work on the introduction of Basagran in other countries and on its application to other crops progressed.

Basagran is valued additionally because it allows the planting of soybeans in narrow rows; as a result the farmer saves work and energy in tending the field, soil erosion by wind and water is minimized, and yields per acreage are increased.

Pyramin®, our proven sugar beet herbicide, was subjected to strong competitive pressures in European beet growing areas, particularly in France, Belgium and the Federal Republic.

Ronilan®, a special fungicide for application to vines, fruit and vegetables, maintained its position in the European market. However, sales of this fungicide as well as others were hindered by adverse weather conditions. The introduction of Ronilan in major overseas markets was continued.

Intensive cereal farming in West Europe must rely on growth regulators and fungicides to achieve high yields. In keeping with this goal business with the Cycocel® growth regulator developed well. Terpal®, a growth regulator applied to barley, again found a ready market.

Development of Corbel®, a mildew and rust fungicide for cereal farming, is almost completed. We are beginning to introduce this product in selected countries.

Pix®, a growth regulator for cotton, was applied primarily in the U. S. and Brazil. Although the drought in the American cotton belt put the product to a crucial test, it was favorably accepted by farmers since it helps to make harvesting easier and to increase yields.

Capital expenditures were targeted towards the expansion of production and research capacities and the opening of new markets, for example in India and Brazil. While plants for the production and formulation of crop protection products are still under construction in India, facilities for the production of Kumulus® S, a fungicide, were put into operation in Brazil.



Above: Pix growth regulators help cotton bolls to mature simultaneously and make machine harvesting – shown here in U.S. operations – more efficient because the entire crop can be harvested at one time.



Below: Our agricultural chemicals also serve professional and hobby gardeners. The Compo® line features products for fertilizing, crop protection and soil amendment.

Our comprehensive product range in this sector is built on major polyolefin, polystyrene and polyvinyl chloride based commodities. The range also includes numerous specialties. In addition, we manufacture semi-finished and finished parts for selected applications.

Business in commodities was burdened severely by the economic downturn. Prices came under strong pressures. Specialties fared better.

Only a few processing steps separate commodities from crude oil, the raw material. For this reason commodities are more susceptible to oil price fluctuations than products with high value-added content. To lessen the impact of this close dependence, we intend to pursue specialization through innovation vigorously.

Altogether 1980 was a weak year for plastics. Sales totaled DM 4.6 billion or 16.8 percent of BASF Group sales.

Tough competition and depressed prices in commodities

Business in polyolefins and PVC was difficult. Earnings were unsatisfactory. In response to the surge in naphtha prices, customers built large inventories and acted cautiously when in the second quarter the pace of naphtha price increases abated. Accordingly the volume of sales decreased. Severe competition led to a drastic price decline at mid-year. Since raw material costs had climbed substantially higher than in the preceding year, a marked deterioration in earnings could not be avoided.

Among the affiliates, Rheinische Olefinwerke, Wesseling, and Compagnie Chimique de la Méditerranée still achieved profits, while Danubia Olefinwerke incurred a loss partly due to interruptions for technical reasons.

We maintained our market leadership in low-density polyethylene by broadening our comprehensive selection of proven products. Lupolen® grades for the manufacture of films used in such agricultural applications as protection of early crops and greenhouse components, sold well.

New engineering materials with improved properties

For the insulation of greenhouses we developed a film that provides 20 percent more insulation than conventional grades.

High-density polyethylene held its market position despite severe competitive pressures and low demand for high-molecular engineering plastics.

Development work concentrated chiefly on processes designed to produce improved materials for the manufacture of large, hollow vessels and films.

The polypropylene market was characterized by excess volume; nevertheless, we strengthened our market for Novolen® grades with new types for injection molded products.

Shipments of Oppanol®, one of our oldest plastics, reached the previous year's level, while Lucobit®, a product consisting of low-density polyethylene and bitumen, was higher in volume. Both grades are used in construction for sealing applications.

A surplus supply of polyvinyl chloride also put prices under severe pressure. Through concentrated product development we adapted the line to anticipated higher market

standards. For example, our Vinidur® thermoplastic engineering materials feature excellent impact and weather resistance. Mainly used in the manufacture of window frames, Vinidur has earned an outstanding performance record in such applications for more than 10 years.

Capital expenditures were primarily earmarked for efficiency improvements and replacements.

Specialties maintain market shares

Specialties also felt the impact of the slackening economy and resulting lower consumption. Nevertheless, we maintained, or, in the case of some specialties, expanded our market shares.

As of the second quarter polystyrene was under severe competitive pressures that led to substantial declines in proceeds during the summer months. Only in the last 3 months of the year did business stabilize to some extent. By introducing new products to the line manufactured in Spain we adjusted our range to the local market and succeeded in expanding our business.

Shipments of Terluran®, Luran® S and Luran® failed to match the previous year's large volume. New flame-resistant grades opened new applications with favorable growth potential.

Above: In many types of construction applications Lucobit® film provides an impermeable seal. The 120 kilometer-long irrigation system for an Ecuadorian plantation required altogether 600,000 m² of Lucobit film.

Below left: Color TV housings are mass produced by injection molding with our polystyrene 456 M.

Below right: Shock absorbing polyurethane automotive body parts help to achieve weight reductions. On the assembly line components made by MR Kunststofftechnik, an affiliate in Diepholz, Germany, are installed on the Audi Quattro.



Polystyrene — proven in diverse applications

The year under report marked the 50th since industrial-scale production of polystyrene was launched in a 60 metric tons/year plant at the Ludwigshafen works. Polystyrene provided the scientific basis for the chemistry and physics of plastics as well as the major processes for the manufacture of synthetic engineering materials. Out of the modest beginnings our capacities for polystyrene have grown to 570,000 metric tons per year and for other styrene polymers to 390,000 metric tons per year. In 1980 the western world consumed altogether 6.2 million metric tons of polystyrene plastics.

Polystyrene engineering materials offer the broadest range of applications. Major uses include packaging, household and electrical appliances, refrigerators and freezers, toys and furniture.

Additional applications for Ultramid® were opened with new glassfiber reinforced grades and with types, introduced in 1979, with special fillers.

Better processing and mechanical properties were realized for Ultraform®. This engineering plastic, produced by Ultraform GmbH, a joint venture of BASF Aktiengesellschaft and Degussa, replaces nonferrous metals in more and more applications.





Steady strong demand for insulating plastics

Rising energy costs continued to spur the demand for Styropor® expandable polystyrene as a thermal insulation material. In Europe the volume of sales for insulation and packaging applications developed satisfactorily. Due to brisk competition it was not possible to recover the full extent of our higher raw material costs.

For roof insulation in old and new buildings, Styrotect® S, a panel system, was developed in cooperation with insulation material producers. This system, easy to apply, also by non-professionals, is tailored to the specific requirements of roof insulation.

Sales in North America were hampered by decreasing demand, while business in Latin America progressed favorably.

Strong competition, in particular by U.S. manufacturers, narrowed our market potential in the Far East.

Growing demand for polyurethane rigid foams

On the strength of a newly broadened and improved product range our production facilities were well utilized. In response to the growing demand, particularly in the North American market, for MDI, a component primarily for the production of rigid polyurethane foam, we started construction of a 45,000 metric tons per year MDI plant in Geismar, Louisiana.

Although demand varied from industry to industry, business in polyurethane granules and systems was successful thanks to an augmented product line.

Demand for polyurethane processing machines tapered off during the second half of the year, largely as a result of the automotive and construction industries' reluctance to invest.

A thin film out of thermoplastic polyurethane granules, developed together with a processor, has drawn substantial interest and has now been included in our production program. The film can be made minutely thin and colored as desired. Although extremely resistant to impact-penetration, tears as well as low temperatures, the film is permeable to steam. It is used as a protective skin for technical parts and foam cushions.

Sales of semi-finished and finished parts gain

In spite of the downturn in the German construction industry, we improved the market position of Styrodur® extruded rigid polystyrene foam insulation panels with excellent pressure resistance. Neopolen® slab foam and beads, based on polyethylene, developed favorably.

Thanks to our line of products tailored to the specific needs of the automotive industry, sales of these and other semi-finished and finished parts increased despite the lagging economy. A new engineering material out of polypropylene filled with wood flour was received well in the market. This semi-finished product can be lined with decorative film and processed into formed parts in one production step, for example for use as interior door panels in cars.

Palusol® fire protection panels were accorded growing interest. They provide designers the opportunity to apply architecturally compatible solutions to problems of fire protection.

On a summer Sunday in New York's Central Park roller skaters practice their art. As a supplier of polyurethane raw materials, from which the wheels are manufactured, BASF Wyandotte Corporation helps to keep the fun rolling.

Chemicals

Beginning with a few basic chemicals, we produce via processing steps chemicals for diverse industrial applications, intermediates for syntheses, and sophisticated finished products such as vitamins, flavors and fragrances. Fiber raw materials, industrial chemicals and intermediates in particular suffered the consequences of a lagging economy. Selling prices of most commodities were unsatisfactory. Altogether sales reached DM 5.2 billion and accounted for 18.9 percent of BASF Group sales.

Securing the supply of basic chemicals

Basic chemicals which we need for processing are largely produced captively. The utilization of the big plants supplying these products reflected the general course of business. Initially they operated at high capacity levels, but already in early summer utilization dropped rapidly. Costs of products were substantially impacted by higher raw material and energy prices which rose unabatedly throughout the year.

Basic chemicals, petrochemicals, inorganic chemicals, technical gases and catalysts achieved overall sales gains, although chiefly attributable to higher prices. The volume sold in Germany exceeded exports. Business in catalysts benefited from product improvements.

At the Ludwigshafen complex steam-cracker II went on stream. This plant converts annually 1 million metric tons of naphtha, supplied primarily by our Mannheim refinery, into important basic petrochemicals. Its major products are 300,000 metric tons of ethylene per year and 165,000 metric tons of propylene per year. Ethylene is a raw material for the production of plastics, such as polyvinyl chloride and polystyrene, and for ethylene glycol and other intermediates. Propylene is a starting material for plasticizers and plastic dispersions. Most of the output of this large-scale plant is used captively by processing facilities in the Ludwigshafen complex. In Ludwigshafen, too, construction of a plant for the production of ammonia was started; it will replace older facilities.

Increasing specialization in industrial chemicals

Altogether the volume of industrial chemicals declined and so did the utilization of our plants. During the year prices came increasingly under pressure. Earnings deteriorated due to rising raw material and energy costs.

To assure the supply of ethylene oxide to our processing plants, a 150,000 metric tons per year production facility was put on stream. It operates with a catalyst developed by us. The old plant with a capacity of 50,000 metric tons per year was shut down. Ethylene oxide is needed for more than 150 products, including surfactants, antifreezes and ethanolamines. At the Antwerp site, ethylene glycol capacities were expanded by 30,000 metric tons to 160,000 metric tons annually.

Plasticizers and plasticizer alcohols maintained their market shares despite lower demand.

A good market existed for our specialties for crude oil production and processing. Especially in demand were Separol® and Sepacid® grades which are used increasingly in crude oil production.

The anti-corrosion systems in Glycantin® antifreezes were adapted to the growing use of light metals in engines. The years of experience gathered with these systems also benefited heat transport fluids which we offer for solar installations and heat pumps.

Shipments of Sedipur® flocculants increased, attributable in part to improved dehydration methods. It was 25 years ago that the first test for clarifying coal wash water with synthetic water-soluble high-polymers was performed. Today Sedipur also plays an important role in dewatering sludge in our large effluent treatment plant at the Ludwigshafen works.

Business in laminating and impregnating resins for the woodworking industry was subject to the recession in the furniture and construction industries. Declines in the volume of sales could not be avoided.

Considerable progress was made with the introduction of modified Kaurit® and Kauramin® resins for the production of particle board containing less formaldehyde. To supply the Greek market primarily, we expanded the Kaurit plant at Victor AG, Thessaloniki, an affiliate, to 50,000 metric tons per year and put a plant for the production of 18,000 metric tons of formaldehyde per year into operation.

New plants to produce intermediates

Intermediates achieved the preceding year's sales and maintained their advantageous market positions. Nevertheless volume and earnings declined as a consequence of the weakness in the economy and the upsurge in costs.

Amines are one of our major product lines in this sector. We offer the broadest selection, mostly for processing into crop protection products, rubber auxiliaries, pharmaceuticals and cosmetics. Increased imports from the U.S., in particular of ethylene oxide-based amines, toughened price pressures in Europe.

At the Antwerp complex we put a plant to produce annually 80,000 metric tons of nitrobenzene, 30,000 metric tons of aniline and 30,000 metric tons of ethylamines into operation. Nitrobenzene and aniline are used at this site for the production of MDI, a polyurethane raw material, while ethylamines offer a wide range of applications in our processing operations as well as in the market. At the Ludwigshafen complex we expanded the capacity for ethanolamines to 85,000 metric tons per year, primarily for captive use. Together with some other conversion and modernization projects, partly of freed capacities in the Ludwigshafen works, these capital expenditures will help to fortify our important position in the market for amines.

Argon, an inert gas that we produce in our air separation plants, acts as a buffer in welding steel. It insulates the weld against oxygen and thus prevents oxidation.



In diols, intermediates for foams and thermoplastics, new plants of competitors created considerable excess volumes, and put added pressure on prices, especially in the European market.

We enhanced our position in the U. S. market by putting a 12,000 metric tons/year neopentyl glycol plant into operation at the Freeport, Texas, site. Neopentyl glycol-based polyesters are increasingly used as coating resins and engineering materials.

Also in the U. S., a tetrahydrofuran plant with a capacity of 6,000 metric tons per year went on stream at the Geismar, Louisiana, works.

The volume of sales of dyestuff intermediates was burdened by the unfavorable conditions in the textile industry.

Brisk demand existed for aliphatic monocarboxylic acids. We therefore are doubling our capacities for formic acid from 50,000 to 100,000 metric tons per year. The plant operates with a new energy-saving production process.



In a flavor application laboratory, in essence a test kitchen, operated by Fritzsche Dodge & Olcott, Inc., New York, an affiliate, new flavor components are tested under household conditions:



Additions to animal feed products and production

In 1980 we continued to expand our share of the market for animal feed additives. Our selection of vitamins contributed significantly to this success. At the Ludwigshafen works we began to operate facilities that produce intermediates for vitamin syntheses as well as new products to augment our line. In Japan a vitamin compounding plant, operated jointly with Nisshin Chemicals, a Japanese partner, was started up. Luprosil®, our series of preservatives, performed appreciably. We introduced Basfin®, an auxiliary for pelletizing animal fodder.

Notwithstanding a slight decline in the demand for fine chemicals, we enhanced our position in exports chiefly with products for the pharmaceutical, cosmetics and food industries as well as for fragrances and flavors. We improved our product range with the addition of new materials and with the acquisition of Fritzsche Dodge & Olcott, a major American producer of flavors and fragrances.

Business in fiber raw materials difficult

Structural changes in the man-made fiber industry continued to benefit countries of the Third World as well as Comecon. As a result the Western European demand for fiber raw materials dropped sharply. Against this background a marked decline in volume was unavoidable in spite of special transactions in the Comecon markets and a higher export volume.

Conditions were different in the U.S. where our local production facilities achieved a satisfactory volume.

The price of cyclohexane, our major feedstock, moved to a record high at year-end and continued to climb in the first quarter of 1981. U.S. competitors benefiting from lower costs of petrochemical raw materials, operated with a lesser burden. As a result competition intensified and put prices under pressure; earnings, too, decreased.

While our production facilities in Europe operated at satisfactory levels only at the beginning of the year, the utilization of our North American plants was low in the first 6 months and then began to recover.

Efficiency improvements in fibers successful

Most of our business focused on the North American market. Despite the impact of the recession in the second and third quarter on the construction and automotive industries, two major customers, we succeeded to achieve higher sales and to keep earnings almost at the preceding year's level. This performance benefited decisively from earlier programs to boost efficiency and institute improvements in production as well as the product line. A new acrylic staple fiber for industrial application was introduced successfully. At the Anderson, South Carolina, works the first section of a spin-draw-texturing plant for nylon carpet yarns went into operation.

Dyestuffs and Finishing Products

Dyestuffs, pigments, textile chemicals and auxiliaries account for a broad range of the production and sales program of the BASF Group. Our products are as diverse as our customers with whom we maintain business relations in markets throughout the world. Business in our broad range of plastic dispersions was not markedly subjected to fluctuations in the economy. However, price concessions had to be instituted to maintain our market shares in pigments and auxiliaries. The world-wide downturn in the textile industry, one of our major customers, depressed our business. Altogether we achieved DM 3.9 billion in sales, representing 14.0 percent of BASF Group sales.

Products for natural fibers succeed despite slowdown in textiles

Business in this sector was characterized by opposing trends in natural and man-made fibers. Products for natural fibers advanced appreciably. We even succeeded in selling more dyestuffs for coloring and printing cotton. Indanthren® dyestuffs, indigo and Basilen® reactive dyes were strong in demand. For printing cotton fabrics with reactive dyes we developed a process that attracted widespread market interest. It uses a new resist agent that allows textile printers to produce sharp and brilliant effects on colored fabrics more efficiently. Among the auxiliaries and finishes, acrylate sizing agents as well as Lutexal® grades for pigment printing were particularly successful.

On the other hand dyestuffs and auxiliaries for coloring and finishing man-made fibers out of polyester and polyacrylonitrile experienced declines. Low demand on the one hand, and surplus supplies on the other put prices under strong pressure.

Altogether sales attained the preceding year's level, earnings, however, fell short of expectations. Capital expenditures were largely limited to replacements.

Pigments and non-textile auxiliaries maintain market shares

Our markets were variously influenced by economic developments. Lower automotive production lessened the demand for pigments for coatings and coloring plastics. Similarly affected were auxiliaries for electro-plating. The lag in construction led to reduced consumption of coatings. The softness in the leather market throughout the year started to revive by year-end. Customers in the paper and printing ink industries were less affected. Overall sales achieved the preceding year's level. Declines in Germany were offset by gains in other European countries.

By and large we succeeded to hold our share of business also in markets subject to weak performances. However, we had to cope with the penetration of overseas competition in Europe and the resulting added pressure on prices. The utilization of our plants dropped in the course of the year. All of these factors contributed to a distinct decline of earnings.

New products spur business opportunities

We streamlined our product range and added new products. The line of Paliotan® blended pigments for automotive coatings stimulated interest thanks to improved characteristics. For offset printing we introduced Sico® yellow pigment. Fastusol® substantive liquid dyestuffs broaden our line of products for coloring paper. The color range of our proven line of Heliogen® blue pigments was augmented with a reddish modification. Our new low-foam surfactants for detergents fulfill the latest legal requirements for biological degradability.

Capital expenditures concentrated on debottlenecking and efficiency improvements.

Broad dispersion line

Business was satisfactory in the first six months of the year, and then began to slow. Altogether sales were higher than last year; price increases, however, did not suffice to offset the rise in costs. Earnings therefore did not quite keep pace with sales.

Generally sluggish business in the chemical industry was reflected in lower demand for acrylic monomers. To meet the increasingly keen competition we concentrated particularly on efficiency improvements in operations. Towards year-end we started construction of a new, large-scale acrylic acid and acrylic esters plant at the Freeport, Texas, works.

Auxiliaries and binders for the manufacture of quality coated papers were strong in demand in all markets. We added to our multifaceted Acrosol® line a product that can be universally applied as a binder to all types of paper and cardboard. The increased use of non-wovens in automotive applications opened additional business opportunities. Beset by strong competitive pressures the volume of Acronal® and Propiofan® grades for the manufacture of paints and plasters barely reached the preceding year's level. Our pure acrylate dispersions succeeded to gain additional market shares.

Sales of products for the construction industry developed favorably. The demand for raw materials for adhesives was also lively. Oppanol® grades, in particular, used in seals for insulating glazing, scored appreciable gains. Part of our business in coating resins fell short of expectations. While a decline was noted for Laroflex® anti-corrosion coatings, Luhydran® resins for cathodic electro-deposition dip coatings won new customers.

Luprenal® and Luwipal® grades for the production of two-coat metallic coatings and automotive top coatings have been successful for a number of years. In 1980, too, these quality products continued to attract avid customer interest. We expanded our Laropal® series with the addition of a new hard aldehyde resin that can be used for numerous requirements and produced at low cost.



Artistic phantasy with its interplay of color and form is basic to design. Chemistry contributes dyestuffs and auxiliaries to make the designer's creativity a reality.

Consumer Products

This business includes products primarily sold directly to end-users: coatings and paints, audio, video and computer products, photopolymer printing plates as well as pharmaceuticals. Coatings and paints advanced notably. The automotive recession did not appreciably affect our business due to the structure of our product line and markets. In addition, new products opened opportunities for new sales. Audio products were subjected to price concessions designed to hold market positions. Business in printing plates, data processing products and pharmaceuticals was less affected by recessionary trends. Total sales reached DM 3.2 billion or 11.4 percent of BASF Group sales.

Coatings and paints: exports compensate

The decline of the German economy hindered business at home. However, higher exports compensated for this lag. Price adjustments offset part of the increased raw material costs in some areas. Earnings were satisfactory.

New opportunities for Cathodip®

Exports contributed substantially to the growth of the automotive coatings volume. This success is attributable to the base material for Cathodip, a cathodic electro-deposition coating which attracted considerable interest among European car manufacturers.

Automotive repair coatings consolidated their strong position in major European markets outside of Germany. Overseas business also developed well.

On the whole business in industrial coatings stagnated. The unsatisfactory volume attained in metal and coil coatings was counterbalanced by successes in exports, primarily of coatings for wood and electrical insulation systems. Demand for building paints slowed along with the decrease in new construction. The decline could not be offset by increased building renovations.

Higher exports spurred sales of printing inks. The various product lines performed unequally. Flexo printing inks were higher in volume due to the introduction of new inks for film, while gravure inks were impacted by a softness in the wallpaper business and the penetration achieved by cheap water-based inks.

Research in automotive coatings focused on the development of high-solids systems, primarily for use as fillers and top coats. We also increased the solids content in two-coat metallic coatings. The high-solids fillers also meet stringent U.S. regulations.

Glassophor® products, developed for electro-deposition coating, augment our range of products for industry. Newly added were also polyurethane-based types for such glassfiber reinforced polyester installations as the telephone booths of the German Federal Post Office.

The range of Beck electro-insulation systems was expanded by Dobeckan® grades that, being resistant to temperature changes, fulfill the television manufacturers requirements for casting resins used to make circuit switching transformers.

Comprehensive development work in printing inks resulted in a flexo printing process that permits substantially improved printing quality.

In Spain, too, K + E® printing inks are used. Glasurit S. A., Madrid, an affiliate, is a leading supplier of inks for gravure printing.



Signs of saturation in audio market

Business in audio products fell short of expectations. The devaluation of the Yen in the first half of the year put us at a competitive disadvantage with Japanese producers. As a result losses in sales volume and proceeds could not be avoided. In countries now saturated with audio recorders, sales of compact cassettes stagnated. Our marketing efforts concentrated on the quality "Ferro Super LH 1", "Chromdioxid", "Ferrochrom" and "Chromdioxid Super" compact cassettes which helped to strengthen our market position.

Changed competitive conditions led to a re-examination of plans to produce an LVR video recorder and to the conclusion to abandon this project. The volume of video cassettes sales for the V 2000, VHS and Betamax systems gained appreciable momentum in recent months. The expansion of capacities for the production of video tapes at the Willstaett works will permit us to participate to a larger extent than heretofore in this rapidly growing market.

Considerable demand for magnetic storage media

We maintain a strong position in the magnetic storage media market. Increased demand favored steady growth rates, even for traditional products such as computer tapes. The range of compatible peripheral storage systems for medium and large electronic data processing installations was enhanced by new peripherals and central processing units. For desk-top computers we added more advanced products to our line. Substantial growth rates were achieved in shipments of media and peripheral storage equipment to computer companies offering their own systems.

Higher market shares for Nyloprint®

In graphic reproduction technology our photopolymer printing plates hold the lead in a market in which U.S. and Japanese competition is becoming more intense. Among European newspapers we increased our market share. To meet the growing demand, we expanded our production facilities for photopolymer Nyloprint printing plates in the Willstaett works. In addition we began to introduce a new flexo printing plate, Nyloflex®. This plate yields quality standards in flexo printing heretofore exclusive with gravure.

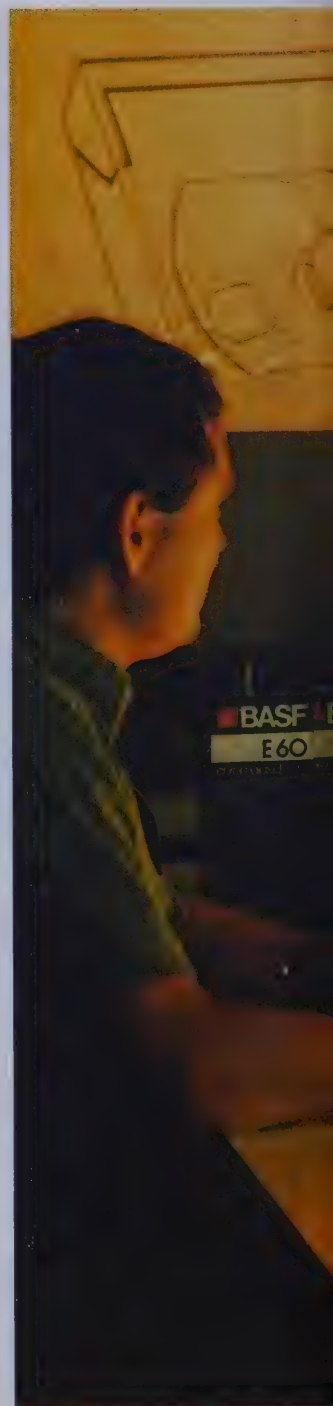
Business in pharmaceuticals favorable

Sales developed favorably, partially on the strength of specialties for cardio-vascular diseases, an area to which we continue to devote intense research efforts. Newly introduced therapeutics include Cordichin® for the treatment of ventricular arrhythmias, Farial®, a spray to reduce swelling of mucous membrane in nasal cavities and Sina® salt, a diet salt with a particularly low sodium content. Applications for government approval of other drugs have been filed.

Prices of infusion and dialysis solutions stabilized compared to the previous year. The introduction of Promit®, a low-molecular dextran solution, provided added impetus to the sales volume. The range of drug chemicals and intermediates was expanded.

In the U.S. we acquired the 50 percent share held by Schering AG in Knoll Pharmaceutical Company, Whippany, New Jersey. The company had been operated as a joint venture.

Video technology is an aid to our employees in sales training.





Operations by Region

We conduct business in 140 countries and operate production sites in 31. About 75 percent of the total Group output originates in the Federal Republic of Germany. Exports by German members of the BASF Group totaled DM 9.7 billion. The BASF Group is active in many countries with varying political, economic and social structures. In agreement with the OECD recommendations of 1976 we recognize our manifold responsibilities to these nations.

Recession impact on European countries differed

The favorable economic development in 1979 that continued into the year under report was followed by recessionary trends. In respect to time and intensity their effect on business varied from country to country.

In Germany a strong decline followed a good first quarter. The volume of sales then dropped constantly until reaching an August low not experienced in recent years. In the last quarter business recovered hesitantly. Exports to countries outside of Germany scored stronger gains than sales in Germany.

Business in France developed more evenly and, on the whole, satisfactorily despite severe competition. The recession in Great Britain took its toll of business in chemicals and plastics and was characterized by severe price deterioration. Altogether, sales were lower. In the Benelux countries we maintained our market positions. Business in Scandinavia was satisfactory.

After a good start in the early months, Spain's economy experienced reversals until year-end. Sales were higher, but volume lagged. Nevertheless, we held our share of the market. Earnings declined because cost increases could not be fully recovered. We started the construction of a new plant for paints and coatings in Guadalajara.

Despite the recession that began in Italy in the second half of the year, we succeeded in achieving the previous year's sales, although volume was down. Business in Switzerland, Austria and Portugal developed better than last year. In Greece, sales of plastics decreased.

Despite varying developments in the different markets of the state-controlled economies of Eastern and South Eastern Europe, we were again able to increase sales. The USSR remained our most important partner in this area.



Business in North America stagnated

A softening of the U.S. economy became evident at the beginning of the year. It deteriorated into a severe recession during the second quarter. The chemical industry was not spared. It had a difficult year. Only at year-end did a slight improvement emerge. On the whole the Canadian economy fared better.

As a result the business of our affiliates was only partially satisfactory. Sales totaled US \$ 1,701 million, a gain of 7 percent compared to the preceding year.

The business of BASF Wyandotte Corporation was considerably impacted by the downturn in the construction and automotive industries. Polyurethane raw materials and Styropor, in particular, were subjected to declines in sales and earnings. However, Basagran crop protection sales increased again in volume, even though the drought in the southwest of the United States hindered soybean cultivation significantly.

Programs designed to restructure the company's production continued to be pursued. During the year the aging facilities at Wyandotte for the production of chlorine and caustic, sodium bicarbonate and propylene oxide, which could no longer be operated profitably, were shut down. In addition we have also decided to phase out electrolytics production at Geismar by 1983. The decision is based on the existence of surplus capacities, sharply rising energy costs and the need for large capital expenditures if operations were to be continued. Current and future costs associated with these shutdowns have been

absorbed fully in the 1980 results of the company.

Under the program to restructure the company's operations, we started construction of a plant to produce 40,000 metric tons of MDI per year and have put a 6,000 metric tons per year tetrahydrofuran plant on stream at the Geismar works.

Additions to the manufacturing facilities for information systems products were completed as a prerequisite for further business expansion. Production of computer peripherals was started.

On the strength of appreciable gains Badische Corporation continued to build on its good sales and earnings performance in the preceding year.

For nylon carpet yarns the first phase of a conversion to spin-draw-texturing was put into operation and the capacity for spin-dyed nylon carpet yarns expanded. At the Williamsburg, Virginia, works we began to enlarge the spinning capacities for acrylic yarns. At the Freeport, Texas, complex construction of a plant for the production of acrylic acid and acrylic esters was started.

In spite of reduced exports to the U.S., BASF Canada operated successfully.

The anti-trust proceedings initiated by the Federal Trade Commission in regard to the acquisition of the Pigments Division of Chemetron Corporation in 1979 are continuing.



BASF GROUP
SALES BY REGION

million DM	1979	1980
European Community	17,054	17,683
	1979	1980
North America	2,946	3,078
West Europe, excl. European Community	2,100	2,491
South and East Asia, Australia	1,180	1,389
Latin America	1,236	1,385
East Europe	752	876
Africa, West Asia	628	829
	25,896	27,731

Above left: In many countries automobile producers use our coatings for electro dip coating of body parts. In this plant in Spain rims are coated with Glassophor from Glasurit S. A., Madrid.

Above right: Production of carpet yarn from acrylic fibers at the Sylvania, South Carolina, works of Badische Corporation in the U.S.

Uneven development in Latin America

In 1980 Brazil's economy again realized considerable growth, although its economic problems also became more serious. The balance-of-payments deficit increased. The inflation rate exceeded 100 percent.

Despite import restrictions that limited the availability of some major raw materials, we still managed to achieve an appreciable gain in sales of products manufactured domestically.

Activities again focused on coatings and paints, pigments and auxiliaries, dyestuffs, dispersions and magnetic tapes. At the Guaratinguetá works of BASF Brasileira plants for the production of crop protection products, computer tapes, intermediates, dispersions and dyestuffs went on stream.

Glasurit do Brasil further strengthened its position as the market leader, in part due to newly-expanded capacities for building paints at a new site in Santa Cruz in the state of Rio de Janeiro, and for metallic coatings in São Bernardo do Campo in the state of São Paulo.

In Mexico we also consolidated our market position, chiefly as a result of added volume from new facilities, erected at our local sites, for the production of leather auxiliaries and chemicals.

Business conducted by our companies in Argentina, Venezuela and Colombia developed unsatisfactorily. Especially in Argentina, the consequences of low import duties, a persisting high rate of inflation and a relatively low devaluation of the currency burdened our local production. Our affiliates in these countries incurred losses.

Exports to Latin America, as a whole, stagnated. Declines were incurred primarily in plastics, dyestuffs, fiber raw materials and magnetic recording media; gains by chemicals, pigments, auxiliaries and crop protection products. Viewed geographically, shipments to Chile and Peru were higher; those to Mexico and, primarily, to Argentina, lower. We were handicapped by competitive disadvantages, in particular opposite U.S. producers whose prices were favored by lower raw material costs.


Business in Africa and West Asia varied

Growing economic and political problems restrained the development of most nations in this region. Lack of foreign exchange burdened all but the oil producing countries. For this reason we were not always able to satisfy the existing demand.

Nevertheless, sales were up 32 percent to DM 829 million. Deliveries stem primarily from our European production facilities.

Mainstays of our business were Nigeria, South Africa, Turkey, Egypt and Morocco. Chemicals, intermediates, crop protection products, dyestuffs, pigments and auxiliaries were notably successful.

Competition continued to increase in major markets, however, we managed to hold our market shares. Improved proceeds realized in the first half of the year were dissipated by higher raw material costs toward year-end.



Checking banana leaves treated with a fungicide at Campinas in Brazil, a new link in our chain of agricultural testing stations which provide different growing conditions in various climates throughout the world.



Markets in South and East Asia, Australia gain importance

The favorable economic development in the countries of the region faded at mid-year, but revived again in some markets towards year-end. However, in some nations shortages of foreign exchange and high inflation rates posed difficulties. Prices in some of our business areas were depressed.

Total sales exceeded the previous year's level by 17.7 percent in reaching DM 1,389 million. We succeeded in consolidating our position in a number of markets. Sales were highest in Japan, China, Australia, Taiwan, India and Indonesia. Chief contributors were industrial chemicals, dyestuffs, intermediates, fiber raw materials and fertilizers.

Business in products from production facilities located in this region developed appreciably and prompted plant expansions. In Japan a plant for the formulation of vitamins went on stream in Ueda and Styropor production capacities were expanded. Together with Tong Yang Nylon Company, Ltd., we established a joint venture, Hyosung-BASF Company, Ltd., for the production of Styropor in South Korea. In Bokaro, India, ground was broken for a new dispersion and dyestuff plant of BASF India Ltd.

Financial Review

Affiliates

BASF GROUP

The BASF Group includes BASF Aktiengesellschaft and all companies which are at least 50 percent owned by BASF Aktiengesellschaft or its majority holdings, as well as the majority holdings of companies in which a 50 percent participation is held.

COMPANIES INCLUDED IN CONSOLIDATION

Included in the consolidation of BASF Aktiengesellschaft and Consolidated German Subsidiaries are BASF Aktiengesellschaft and the German affiliated companies in which BASF Aktiengesellschaft directly or indirectly holds a majority participation.

The Group consolidation comprises BASF Aktiengesellschaft and its directly or indirectly majority-owned German and foreign subsidiaries. In addition, it includes half of the German and foreign 50 percent

participations. Companies of minor importance and companies not included in the consolidation because their inclusion would impair the value of disclosures in the financial statements, are neither included in the Group consolidation nor in the consolidation of BASF Aktiengesellschaft and Consolidated German Subsidiaries. Subsidiaries not included in the consolidation of BASF Aktiengesellschaft and Consolidated German Subsidiaries are listed on pages 55 and 56 under notes to the Consolidated Financial Statements.

I. Companies included in the Group and Consolidated Financial Statements

Company name and headquarters	Holding in percent	Capital stock ¹ in million currency
BASF Aktiengesellschaft, Ludwigshafen		DM 1,998.0
BASF Farben + Fasern AG, Hamburg	100	DM 115.0
BASF Kraftwerk Marl GmbH, Marl ²	100	DM 25.0
Dr. Beck & Co. AG, Hamburg ²	100	DM 3.0
Burbach-Kaliwerke AG, Kassel	98.7	DM 34.0
Canapol Chemie-Beteiligungs-Gesellschaft mbH, Ludwigshafen ²	100	DM ³
Chemikalien-Aktiengesellschaft, Frankfurt ²	100	DM 6.0
Chemische Düngerfabrik Rendsburg GmbH, Rendsburg ²	100	DM 0.1
Chemische Fabrik Kalk GmbH, Cologne ²	100	DM 30.0
Chemische Fabrik WIBARCO GmbH, Ibbenbueren ²	100	DM 7.2
Chemische Werke Minden GmbH, Minden ²	100	DM 1.0
Compakta-Werke Baustoff-GmbH, Traunreut ²	100	DM 1.0
COMPO GmbH Produktions- und Vertriebsgesellschaft, Muenster-Handorf	100	DM 4.0
Deltaplast Kunststoff-Technik GmbH, Lemfoerde ²	100	DM 1.0
Elastogran GmbH, Lemfoerde	100	DM 60.0
Elastogran Kunststoff-Technik GmbH, Lemfoerde ²	100	DM 1.0
Elastogran Maschinenbau GmbH, Lemfoerde ²	100	DM 3.1
Elastogran Polyurethan-Chemie GmbH, Lemfoerde ²	100	DM 0.8
Elastogran Polyurethan-Systeme GmbH, Lemfoerde ²	100	DM 2.3
Erdöl-Raffinerie Mannheim GmbH, Mannheim	100	DM 60.0
Gewerkschaft Auguste Victoria, Marl	100	mining shares 100
Gewerkschaft Haidkopf, Celle ²	100	mining shares 100
Guano-Werke Aktiengesellschaft, Hamburg	97.1	DM 16.8
Kali-Bank AG, Kassel ²	100	DM 2.0
Kali und Salz AG, Kassel	71.7	DM 250.0
Knoll Aktiengesellschaft, Ludwigshafen	82	DM 45.9
LUWOG Wohnungsunternehmen GmbH, Ludwigshafen ²	100	DM 78.0
MIHAG WIESÖL Mineralöle GmbH, Duesseldorf ²	100	DM 16.0
MR Kunststofftechnik GmbH, Diepholz ²	100	DM 0.1
Nordmark-Werke GmbH, Hamburg	100	DM 20.0
SCHL-WA Arzneimittelwerk GmbH, Bad Laer	100	DM 6.0
Transpharm GmbH, Ludwigshafen ²	100	DM ³
Vaerst (AG & Co.), Hamburg	87.5	DM 5.0
Wintershall AG, Celle/Kassel	100	DM 300.0

II. Companies included in the Group Financial Statements only

Company name and headquarters	Holding in percent	Capital stock ¹ in million currency
Ammoniak Unie B. V., Utrecht	50	hfl 12.0
A/S Badilin, Copenhagen	100	dkr 10.5
Badische Corporation, Williamsburg, Virginia	100	US \$ 122.9
including 3 North American majority-owned affiliates		
BASF AG. & Co. Gesellschaft m. b. H., Vienna	100	S 273.0
BASF Aktiengesellschaft für Chemieverfahren, Chur	100	sfr 2.0
BASF America Corporation, New York	100	US \$ 291.1
BASF Antwerpen N. V., Antwerp	100	bfr 2,500.0
BASF Argentina S. A., Buenos Aires	100	Arg \$ 34,712.0
BASF Australia Ltd., Melbourne	100	A \$ 3.2
BASF Brasileira S. A., Indústrias Químicas, São Paulo	100	Cr \$ 2,606.0
BASF Canada Inc., Montreal	100	Can \$ 34.7
BASF Chemiewerte-Aktiengesellschaft, Zurich	100	sfr 0.1
BASF Chimie S. A., Brussels	100	bfr 100.0
BASF de México, S. A. de C. V., México, D. F.	100	Mex \$ 271.0
BASF Española S. A., Barcelona	100	Pta 1,500.0
BASF Farben + Fasern Gesellschaft m. b. H., Vienna	100	S 25.0
BASF Finance Europe N. V., Arnhem	100	hfl 46.4
BASF Holding-Aktiengesellschaft, Zurich	100	sfr 1.0
BASF Holding Luxembourg S. A., Luxembourg	100	lfr 380.0
BASF India Ltd., Bombay	50	iR 15.8
BASF Japan Ltd., Tokio	100	Yen 2,442.0
BASF Mexicana, S. A., México, D. F.	100	Mex \$ 186.0
BASF Nederland B. V., Arnhem	100	hfl 3.5
BASF Österreich Gesellschaft m. b. H., Vienna	100	S 81.0
BASF Overzee N. V., Willemstad	100	NAfl 17.9
BASF Química Colombiana S. A., Bogotá	100	Col \$ 190.0
BASF (Schweiz) AG, Wädenswil, Au	100	sfr 6.0
BASF Svenska AB, Goeteborg	100	skr 3.0
BASF Systems Corporation, Bedford, Massachusetts	100	US \$ 15.0
BASF Transatlantica, S. A., Panamá	100	US \$. ³
BASF United Kingdom Ltd., Cheadle, Cheshire	100	£ 0.8
BASF Venezolana S. A., Caracas	100	Bs 23.4
BASF Wyandotte Corporation, Parsippany, New Jersey	100	US \$ 182.2
including 3 North American majority-owned affiliates		
CIS AG, Liestal	100	sfr 4.3
Compagnie Chimique de la Méditerranée S. A., Berre-l'Etang	50	ffr 50.0
Compagnie Française BASF S. A., Levallois	100	ffr 40.0
Danubia Olefinwerke Ges. m. b. H., Schwechat	50	S 420.0
Delfzee B. V., Den Haag	100	hfl 12.0
Delfzee Dubai Handelsmij. B. V., Den Haag	100	hfl . ³
Delfzee Dubai Petroleum N. V., Den Haag	100	hfl 25.0
EBEWE Arzneimittel Ges. m. b. H., Unterach	66.7	S 14.4
Fritzsche Dodge & Olcott, Inc., New York	100	US \$ 126.3
including 11 majority-owned affiliates		
Gewerkschaft Victor, Chemische Werke, Castrop-Rauxel ²	50	mining shares 1,000
Glasurit do Brasil Ltda., São Bernardo do Campo	100	Cr \$ 1,295.9
including 1 majority-owned affiliate		
Glasurit S. A., Madrid	98.4	Pta 164.0
Interknoll AG, Liestal	100	sfr 0.8
Isonor Indústria de Plásticos S. A., Recife	91.2	Cr \$ 102.9
Isopor Indústria e Comércio de Plásticos Ltda., São Bernardo do Campo	100	Cr \$ 166.0
Knoll AG, Liestal	100	sfr 2.2
Knoll Pharmaceutical Company, Whippany, New Jersey	100	US \$ 2.4
Knoll S. A., Rio de Janeiro	100	Cr \$ 544.7
Laboratoires BIOSEDRA S. A., Malakoff	100	ffr 9.3
Nupharma AG, Liestal	100	sfr 0.2
Peintures + Encres BASF S. A., Le Bourget	100	ffr 17.6
Pharmasynthese S. A., St. Pierre-les-Elbeuf	100	ffr 1.0
Produits et Engrais Chimiques du Rhin, Ottmarsheim	50	ffr 131.3
Rheinische Olefinwerke GmbH, Wesseling ²	50	DM 300.0
M. Schaerer AG, Wabern	100	sfr 2.0
SEGEDIT S. A., Malakoff	100	ffr 6.3
Suma S. A., Gien (Loiret)	100	ffr 25.0
Yuka Badische Company Ltd., Yokkaichi	50	Yen 1,500.0

¹ Nominal or paid-in capital for foreign companies

² Profit transfer agreements between these companies and their parent companies

³ The capital of these companies totals less than 50,000 in respective local currency.

Major Affiliates / Germany

Company name and headquarters	Products	Number of employees
BASF Farben + Fasern AG, Hamburg	Coatings, paints, printing inks, pigments, fiber technology	6,303
BASF Kraftwerk Marl GmbH, Marl	Electricity	214
Elastogran GmbH, Lemförde (including its German majority-owned affiliates)	Polyurethane systems, machinery and equipment for polyurethane processing, thermoplastic engineering materials and polyurethane engineering parts	1,305
Erdöl-Raffinerie Mannheim GmbH, Mannheim	Petroleum products	423
Gewerkschaft Auguste Victoria, Marl	Coal	5,741
Gewerkschaft Victor, Chemische Werke, Castrop-Rauxel	Fertilizers	1,285
Guano-Werke Aktiengesellschaft, Hamburg	Fertilizers	813
Kali und Salz AG, Kassel	Potash, rock salt, inorganic chemicals, fertilizers	8,832
Knoll Aktiengesellschaft, Ludwigshafen	Pharmaceuticals, pharmaceutical chemicals, hospital supplies	2,173
Nordmark-Werke GmbH, Hamburg	Pharmaceuticals	902
Rheinische Olefinwerke GmbH, Wesseling	Polyolefins, styrene, butadiene, epoxy resins, thermoplastic rubber	3,424
Wintershall AG, Celle/Kassel	Crude oil, natural gas, petroleum products	3,240

Major Affiliates / Abroad

Company name and headquarters	Products	Number of employees
Europe		
Ammoniak Unie B. V., Utrecht, Netherlands	Ammonia	45
BASF Antwerpen N. V., Antwerp, Belgium	Fertilizers, plastics, raw materials for plastics and fibers, chemicals	2,942
BASF Española S. A., Barcelona, Spain	Plasticizers and raw materials, Styropor, polystyrene, Ultramid, plastic dispersions, auxiliaries, crop protection products, compact cassettes	975
Compagnie Chimique de la Méditerranée S. A., Berre-l'Étang, France	Polyethylene	134
Danubia Olefinwerke Ges. m. b. H., Schwechat near Vienna, Austria	Polyethylene	261
Glasurit S. A., Madrid, Spain	Marine paints, automotive and industrial coatings, house paints, printing inks	693
Produits et Engrais Chimiques du Rhin, Ottmarsheim, France	Fertilizers	519
SEGEDIT S. A., Malakoff, France ²	Pharmaceuticals	400
Suma S. A., Gien (Loiret), France	Magnetic foils and tapes, compact cassettes	515

¹ Net sales and earnings before income taxes

² Including its majority-owned affiliates

As of December 31, 1980

Holding acquired	Capital stock million DM	Holding in percent	Capital expenditures million DM	Sales ¹ million DM 1980 (1979)	Pre-tax earnings ¹ million DM 1980 (1979)
1965/72	115	100	48.4	1,075.5 (1,015.6)	84.7 (72.0)
1962	25	100	0.2	67.9 (63.6)	Profit transfer agreement
1969	60	100	15.0	400.6 (339.5)	19.1 (31.1)
1968	60	100	8.8	312.7 (348.3)	30.0 (27.1)
1907/53	100 mining shares	100	39.5	571.0 (528.4)	5.9 (6.9)
1968	1,000 mining shares	50	8.0	260.7 (253.8)	Profit transfer agreement
1968	16.8	97.1	6.9	321.6 (261.0)	13.8 (6.2)
1972	250	71.7	132.0	1,394.8 (1,283.5)	125.4 (101.1)
1975	45.9	82	16.5	358.2 (296.6)	22.4 (15.6)
1968	20	100	6.5	119.3 (114.2)	2.5 (5.2)
1953	300	50	49.8	2,162.7 (2,230.2)	Profit transfer agreement
1968	300	100	99.4	4,995.1 (4,297.8)	249.0 (338.8)

Holding acquired	Capital stock million local currency	Holding in percent	Capital expenditures, million local currency	Sales ¹ million local currency 1980 (1979)	Pre-tax earnings ¹ million local currency 1980 (1979)
1965	12 Dutch Guilders	50	0.7 Dutch Guilders	96.8 (87.1) Dutch Guilders	2.7 (2.3) Dutch Guilders
1964	2,500 Belgian Francs	100	1,929.5 Belgian Francs	30,607.7 (29,886.8) Belgian Francs	297.9 (704.4) Belgian Francs
1966	1,500 Pesetas	100	284.4 Pesetas	16,421.1 (14,664.8) Pesetas	588.7 (1,083.1) Pesetas
1966	50 French Francs	50	5.9 French Francs	318.2 (358.0) French Francs	3.0 (17.4) French Francs
1967	420 Austrian Shillings	50	11.9 Austrian Shillings	1,688.7 (975.2) Austrian Shillings	-41.6 (83.9) Austrian Shillings
1969	164 Pesetas	98.4	126.7 Pesetas	4,296.3 (3,462.8) Pesetas	181.2 (224.7) Pesetas
1968	131.3 French Francs	50	6.3 French Francs	415.6 (354.0) French Francs	3.7 (4.9) French Francs
1970	6.3 French Francs	100	10.1 French Francs	128.0 (112.9) French Francs	0.1 (1.0) French Francs
1962	25 French Francs	100	29.5 French Francs	101.4 (98.2) French Francs	0.5 (6.3) French Francs

Major Affiliates / Abroad

Company name and headquarters	Products	Number of employees
North America		
Badische Corporation, Williamsburg, Virginia, USA ²	Acrylic acid, acrylic esters, oxo alcohols, caprolactam, neopentyl glycol, nylon and acrylic fibers	3,940
BASF Canada Inc., Montreal, Canada	Oxo alcohols, phthalic anhydride, plasticizers, Styropor, auxiliaries	586
BASF Systems Corporation, Bedford, Massachusetts, USA	Magnetic audio and video media, computer products	1,105
BASF Wyandotte Corporation, Parsippany, New Jersey, USA ^{2,3}	Chemicals, polyurethane intermediates, Styropor, dyestuffs, auxiliaries, crop protection products, vitamins	4,584
Latin America		
BASF Argentina S. A., Buenos Aires, Argentina	Styropor, plastic dispersions, auxiliaries, pigment preparations, crop protection products	349
BASF Brasileira S. A., Indústrias Químicas, São Paulo, Brazil ²	Styropor, foamed Styropor, plastic dispersions, dyestuffs, reducing agents, pigments, auxiliaries, crop protection products, magnetic tapes	3,354
BASF Mexicana, S. A., México, D. F., Mexico	Polyurethane systems, plastic dispersions, pigment preparations, inorganic pigments, auxiliaries	402
BASF Química Colombiana S. A., Bogotá, Colombia	Formaldehyde, tanning agents, polyester resins, plastic dispersions, pigment preparations, auxiliaries, crop protection products	460
Glasurit do Brasil Ltda., São Bernardo do Campo, Estado do São Paulo, Brazil ²	Automotive and industrial coatings, automotive repair coatings, house paints, surfacers	2,338
Asia and Australia		
BASF Australia Ltd., Melbourne, Australia	Styropor, plastic dispersions, auxiliaries, polyurethane systems	239
BASF India Ltd., Bombay, India	Styropor, foamed Styropor, tanning agents, auxiliaries, crop protection products, plastic dispersions	576
BASF Japan Ltd., Tokyo, Japan	Auxiliaries, compact cassettes	311
BASF-Sümerbank Türk Kimya Sanayii A. S., Istanbul, Turkey	Formaldehyde, Kaurit adhesives, auxiliaries, plastic dispersions, pigment preparations	167
Yuka Badische Company Ltd., Yokkaichi, Mie Pref., Japan	Styropor, plastic dispersions, polystyrene foam sheets	226

¹ Net sales and earnings before income taxes

² Including its majority-owned affiliates

³ Excludes 1980 BASF Systems Division data which is included in BASF Systems Corporation, incorporated on December 31, 1980

Holding acquired	Capital stock million local currency	Holding in percent	Capital expen- ditures, million local currency	Sales ¹ million local currency	Pre-tax earnings ¹ million local currency
				1980 (1979)	1980 (1979)
1958	122.9 U.S. \$	100	57.9 U.S. \$	453.2 (398.3) U.S. \$	22.1 (15.9) U.S. \$
1954	34.7 Can. \$	100	5.2 Can. \$	178.9 (173.7) Can. \$	9.8 (11.6) Can. \$
1964/80	15.0 U.S. \$	100	8.8 U.S. \$	66.4 U.S. \$	-3.0 U.S. \$
1970	182.2 U.S. \$	100	112.0 U.S. \$	1,010.4 (1,103.1) U.S. \$	-76.8 (6.8) U.S. \$
1969	34,712 Arg. Pesos	100	2,016.4 Arg. Pesos	94,518.8 (66,150.5) Arg. Pesos	-11,178.3 (-6,918.8) Arg. Pesos
1955	2,606 Cruzeiros	100	1,319.4 Cruzeiros	10,237.2 (4,056.6) Cruzeiros	878.7 (12.1) Cruzeiros
1964	186 Mex. Pesos	100	51.2 Mex. Pesos	859.4 (618.0) Mex. Pesos	42.7 (31.5) Mex. Pesos
1969	190 Col. Pesos	100	36.3 Col. Pesos	1,808.6 (1,518.3) Col. Pesos	-35.7 (46.4) Col. Pesos
1967	1,295.9 Cruzeiros	100	369.7 Cruzeiros	9,072.9 (3,913.5) Cruzeiros	1,133.3 (213.0) Cruzeiros
1963	3.2 Austr. \$	100	0.6 Austr. \$	50.6 (45.4) Austr. \$	0.1 (1.3) Austr. \$
1960	15.8 Ind. Rupees	50	14.9 Ind. Rupees	177.0 (154.4) Ind. Rupees	12.5 (19.2) Ind. Rupees
1953	2,442 Yen	100	150.3 Yen	27,559.8 (25,019.0) Yen	520.7 (871.1) Yen
1969	60 Turk. Pounds	60	71.5 Turk. Pounds	1,015.4 (827.1) Turk. Pounds	113.0 (290.0) Turk. Pounds
1962	1,500 Yen	50	1,214.2 Yen	18,760.7 (15,587.8) Yen	1,156.3 (1,501.2) Yen

1980 Financial Statement
Balance Sheet of the BASF Group as of December 31, 1980

Assets	Dec. 31, 1980 1,000 DM	Dec. 31, 1979 1,000 DM
I. FIXED ASSETS		
A. PROPERTY, PLANT AND EQUIPMENT	7,723,382	7,678,578
B. PATENTS, TRADEMARKS, FRANCHISES	102,255	16,215
C. INVESTMENTS		
1. Investments in affiliates	337,922	323,923
2. Long-term loans to affiliates	30,945	30,118
3. Other investments and long-term loans	314,049	463,120
	682,916	817,161
	8,508,553	8,511,954
II. CURRENT ASSETS		
A. GOODS ON LEASE	125,071	117,116
B. INVENTORIES	4,305,331	3,630,005
C. UNCOMPLETED CONTRACTS	172,391	158,508
D. NOTES AND ACCOUNTS RECEIVABLE		
1. Notes receivable	262,382	193,907
2. Accounts receivable-trade	3,593,664	3,371,308
3. Other receivables	381,336	347,094
4. Allowance for doubtful receivables	(209,612)	(180,115)
5. Receivables from affiliates	206,713	176,638
	4,234,483	3,908,832
E. CASH AND CASH ITEMS		
1. Marketable securities	101,036	161,359
2. Cash	569,160	701,638
	670,196	862,997
	9,507,472	8,677,458
III. DEFERRED CHARGES AND PREPAID EXPENSES	266,229	203,204
	18,282,254	17,392,616

Capital and Liabilities	Dec. 31, 1980 1,000 DM	Dec. 31, 1979 1,000 DM
I. STOCKHOLDERS' EQUITY		
A. PAID-IN CAPITAL		
1. Capital stock of BASF Aktiengesellschaft	1,997,971	1,970,956
2. Paid-in surplus	1,844,207	1,804,031
	3,842,178	3,774,987
B. EARNED SURPLUS		
1. As of January 1	2,964,593	2,578,135
2. Dividend of BASF Aktiengesellschaft (previous year)	(315,353)	(232,675)
3. Net income	358,747	619,133
4. Other changes	10,452	—
5. As of December 31	3,018,439	2,964,593
EQUITY OF BASF GROUP	6,860,617	6,739,580
II. BALANCE ARISING FROM CONSOLIDATION	45,245	9,847
III. MINORITY INTERESTS	131,999	130,910
IV. SPECIAL RESERVES	698,508	720,534
V. LONG-TERM RESERVES		
1. Pension reserves	2,269,207	2,049,219
2. Other long-term reserves	944,659	807,517
	3,213,866	2,856,736
VI. LONG-TERM LIABILITIES		
1. Bonds and promissory notes	1,056,515	1,041,069
2. Long-term liabilities to banks	368,724	414,827
3. Other long-term liabilities	417,944	346,267
4. Long-term liabilities to affiliates	84,516	74,919
	1,927,699	1,877,082
VII. CURRENT LIABILITIES AND ACCRUALS		
1. Accounts payable-trade	2,040,224	1,884,822
2. Notes payable	337,951	319,789
3. Short-term liabilities to banks	684,970	409,725
4. Advances received	215,227	205,372
5. Accrued taxes and tax liabilities	672,329	725,200
6. Other accrued charges	660,363	572,579
7. Other short-term liabilities	696,927	836,967
8. Short-term liabilities to affiliates	70,566	76,890
	5,378,557	5,031,344
VIII. DEFERRED INCOME	25,763	26,583
	18,282,254	17,392,616

**Statement of Income of the BASF Group
for the Year Ended December 31, 1980**

	1980 1,000 DM	1979 1,000 DM
NET SALES		
To third parties	26,985,299	25,171,487
To non-consolidated affiliates	745,311	724,357
TOTAL	27,730,610	25,895,844
Cost of sales	22,304,998	20,273,308
GROSS PROFIT	5,425,612	5,622,536
Administrative, selling and other costs	3,594,421	3,332,360
INCOME FROM OPERATIONS	1,831,191	2,290,176
OTHER EXPENSES AND INCOME		
Expenses for non-consolidated affiliates	14,818	11,484
Other income from investments	63,609	20,293
Interest income	151,061	125,181
Interest expense	402,968	369,776
Write-downs of investments	6,193	625
Losses on currency transactions (net)	90,260	40,718
Other expense (net)	260,904	309,872
TOTAL	(560,473)	(587,001)
INCOME BEFORE INCOME TAXES AND MINORITY INTERESTS	1,270,718	1,703,175
Income taxes	891,411	1,067,270
INCOME AFTER TAXES	379,307	635,905
Minority interests in income	20,560	16,772
NET INCOME	358,747	619,133

We have examined the balance sheets of the BASF Group as of December 31, 1980 and 1979 and the related statements of income for the years then ended. Our examinations were made in accordance with auditing standards generally accepted in Germany and in the United States of America and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of certain BASF subsidiaries and affiliates, which statements reflect assets constituting 24% and 20%, respectively, of Group assets as of December 31, 1980 and 1979 and revenues constituting 36% and 31%, respectively, of Group revenues for the years ended December 31, 1980 and 1979. These financial statements were examined by other auditors whose reports thereon have been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for such companies, is based solely upon the reports of the other auditors.

As discussed in the notes to the Financial Statements of the BASF Group, the financial statements of

German companies are prepared and included in the Group Financial Statements in accordance with the accounting and valuation principles legally prescribed in Germany. The financial statements of the foreign companies are included in accordance with generally accepted accounting principles commonly followed by companies in the United States of America except that interest as a part of the cost of qualifying property, plant and equipment was not capitalized as required under such principles beginning in 1980; the capitalization of such interest would increase the BASF Group property, plant and equipment by DM 45.5 million and stockholders' equity by DM 32.6 million at December 31, 1980, and increase net income by DM 32.6 million, net of tax effects, for 1980. Reference is also

made to the notes to the Group Financial Statements for descriptions of and the effects of the major differences between German accounting principles and those generally accepted in the United States.

In our opinion, based upon our examinations and the reports of other auditors, except for the aforementioned effects of the foreign companies not capitalizing interest beginning in 1980, the above mentioned Financial Statements of the BASF Group present fairly its financial position at December 31, 1980 and 1979 and the results of its operations for the years then ended in conformity with the accounting principles referred to in the preceding paragraph, applied on a consistent basis.

Stuttgart/Washington, D. C.,
April 7, 1981

**Schitag
Schwäbische Treuhand-
Aktiengesellschaft**
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft

Dr. Frey Prof. Dr. Csik
Wirtschaftsprüfer Wirtschaftsprüfer

Deloitte Haskins & Sells
Certified Public Accountants

J. M. Crawford T. F. Bluey
Partner Partner

Companies included in the Financial Statements

The consolidated Financial Statements of the BASF Group include the financial statements of BASF Aktiengesellschaft, its significant subsidiaries and, on a proportional consolidation basis, the significant fifty-percent-owned affiliates. The Group consolidation thus includes BASF Aktiengesellschaft, 104 subsidiaries and 8 fifty-percent-owned affiliates. Subsidiaries and 50-percent-owned affiliates not consolidated as well as the significant less than 50-percent-owned affiliates are included using the equity method of accounting.

Changes in companies included in the Group in 1980 were:

Newly included was Fritzsche Dodge & Olcott, Inc., New York, N. Y. and its subsidiaries, which were acquired in early 1980. After acquisition of the second half of the investment in the Knoll Pharmaceutical Company, Whippany, N. J., the former 50-percent-owned affiliate became a consolidated subsidiary as of the middle of 1980. Also newly included was Delta-plast Kunststoff-Technik GmbH, Lemförde, a newly incorporated subsidiary of Elastogran GmbH.

Some subsidiary or affiliate companies whose volume decreased significantly were deleted from the 1980 Group consolidation.

Other changes during 1980 in the number of consolidated companies were due to reorganizations and mergers of companies. The former Systems Division of BASF Wyandotte Corporation was newly incorporated as BASF Systems Corporation, Bedford, Mass.

These additions and deletions of companies had no material effect upon the Group Financial Statements.

Principles of accounting and valuation

The financial statements of German companies are prepared and included in the Group Financial Statements in accordance with the accounting and valuation principles legally prescribed in Germany.

The financial statements of the foreign companies are included in accordance with the generally accepted accounting principles commonly followed by companies subject to the requirements of the Securities and Exchange Commission (SEC) in the United States. However, not included is interest cost in the acquisition or production cost of qualifying assets, as prescribed in accordance with these principles, starting with the fiscal year 1980 because interest cost as in the past is being expensed in the period in which it is incurred.

Had the financial statements of all the companies been included on the basis of U. S. accounting principles, the stockholders' equity and net income would have changed as follows:

Increase of stockholders' equity as of December 31, 1980 and 1979 by DM 1,425.8 million and DM 1,376.8 million, respectively; increase of income after taxes for 1980 and 1979 by DM 49.0 million and DM 142.9 million, respectively.

These differences result primarily from the valuation of investments acquired by issuing shares, when the issued shares are accounted for at nominal value as permitted by German law, the application of special tax regulations to the valuation of property, plant and equipment and investments, appropriations to and from special reserves, the non-application of the capitalization of interest cost as prescribed by U. S. accounting principles, and the immediate charge to income in 1974 as a result of the change to the discounted value method for the determination of pension reserves rather than amortization of the charge over an extended period.

Also, U. S. principles would require additional disclosures and explanations: The presentation of sales,

income and assets in different business segments and foreign operations, additional income tax disclosures, certain disclosures of leased assets and lease commitments, certain disclosures of the effects of changes in purchasing power, certain disclosures of proved and developed crude oil and natural gas reserves and the separate reporting of extraordinary items. These additional disclosures would have no effect upon stockholders' equity or net income.

Principles of currency conversion

Foreign currency financial statements are translated into DM for the purpose of inclusion in the Group financial statements as follows:

- a) Revenue and expenses — at quarterly average rates, except for depreciation, depletion, the disposal of fixed assets and inventories consumed in cost of sales which have been translated at historical rates.
- b) Property, plant and equipment, intangible assets, deferred charges, investments in affiliates and inventories carried at cost — at historical rates.
- c) All other assets and liabilities — at rates existing at the close of the year.
- d) Gains and losses resulting from assets and liabilities translated at balance sheet rates are charged or credited to income.

Property and depreciation

Property, plant and equipment is generally stated at cost less accumulated depreciation. In case of permanent diminution of value, special depreciation is made. Additions, betterments and renewals are capitalized. Maintenance and repair costs are charged to income. In general, depreciation is computed under the declining balance method where permitted, otherwise under the straight-line method. The annual rates are based on estimated useful lives for the various types of property. Special accelerated depreciation of fixed assets, as permitted under special tax regulations, is taken by the German companies to the fullest extent allowable within available time limits. Fixed asset acquisitions of low value are charged against income in the year of acquisition. Gains or losses realized when assets are sold or otherwise disposed of are taken into income, unless special German tax regulations permit a deferral of such gains, in which case the amount is credited to certain new additions or temporarily deferred as special reserve in the balance sheet. Costs to drill and equip producing oil and gas wells are capitalized and amortized over the period of expected production. Geophysical expenditures, including exploratory and dry hole costs, are charged against income. Concession acquisition costs are capitalized and amortized over the expected term.

Property, plant and equipment is summarized as follows:

million DM	December 31,	
	1980	1979
Land	568.3	551.8
Buildings	5,003.9	4,827.6
Machinery and equipment	18,094.3	17,382.8
Construction in progress, including advances	1,014.6	1,025.1
	24,681.1	23,787.3
Accumulated depreciation	16,957.7	16,108.7
Property, plant and equipment, net	7,723.4	7,678.6

Provision for depreciation for the years 1980 and 1979 amounted to DM 1,592.2 million and DM 1,628.0 million, respectively.

Inventories

Inventories are stated at acquisition or production cost or at the lower market value. The lower market value represents replacement cost in case of raw materials and supplies and in case of semi-finished and finished products the expected sales proceeds less costs to be incurred prior to sale. Cost includes direct costs and an appropriate portion of the production overhead including depreciation charges. Generally cost is determined under the average cost method. However, certain inventories have been determined by the Lifo-method (last in – first out) aggregating DM 700.8 million in 1980 and DM 725.8 million in 1979. The aggregate value determined at average cost or at the lower market value would amount to DM 954.5 million and DM 914.2 million in 1980 and 1979, respectively.

In 1979 the extended application of the Lifo-method to inventories by a consolidated subsidiary, decreased net income by DM 62.3 million.

Cash and cash items

Marketable securities are carried at cost or market value, whichever is lower.

Cash is summarized as follows:

million DM	December 31,	
	1980	1979
Time deposits	337.8	481.6
Cash on hand and demand deposits	231.4	220.0
	569.2	701.6

Paid-in capital

Paid-in capital includes the total of capital stock of BASF Aktiengesellschaft, the premiums paid for capital stock and the reserves contributed from the decartelization of IG Farbenindustrie Aktiengesellschaft. Changes in these items resulting from the issuance of shares during 1980 and information concerning conditionally authorized capital are shown in the notes to the Financial Statements of BASF Aktiengesellschaft.

Earned surplus

The earned surplus consists of the free reserves appropriated from profits and the profit available for dividend of BASF Aktiengesellschaft and the undistributed earnings or losses since dates of acquisition of the consolidated subsidiaries and affiliates and the proportional earnings of the investments carried under the equity method of accounting.

Balance arising from consolidation

Balances arising from consolidation result from differences between the recorded costs of acquisition of investments in consolidated companies and the underlying net assets at the time of acquisition.

Debit balances represent acquired goodwill together with any excess of the fair value over the book value of net assets at the acquisition date which has not been allocated to other Group balance sheet items. Debit balances are amortized on a regular basis.

Credit balances arise from acquisitions made by issuing shares for investments when such shares were accounted for at nominal value as permitted by German law, and from permitted valuation adjustments of investments under German tax regulations. In 1980, an amount equivalent to the gain from sale of an investment has been taken as a special write-off against the new investment in Fritzsche Dodge & Olcott, Inc., and is included in other expense (net).

Individual debit and credit balances are netted and result in a net credit excess.

Special reserves and long-term reserves

Special reserves relate primarily to reserves for price increases of inventories and similar reserves or deferrals of gains as permitted under German tax regulations. Other long-term reserves consist mainly of amounts provided for risks and probable losses in connection with oil, gas and mining operations.

Long-term liabilities

Bonds and promissory notes, due after one year, are summarized as follows:

	million DM	
	December 31, 1980	1979
BASF Aktiengesellschaft:		
8½% Bonds of 1974 with detachable stock warrants, due 1983–1986	328.5	338.5
5% Debentures of 1959, due 1970–1984	—	2.5
Various promissory notes at 6¾–7½% interest, maturing serially 1972–1982	5.0	17.5
Subsidiaries and 50-percent-owned affiliates:		
6½% Swiss Franc Bonds of BASF Finance Europe N. V. of 1976, due 1991	110.4	107.2
7½% U. S. Dollar Notes (private placement) of BASF Overzee N. V. of 1978, due 1982	98.0	86.5
Redeemable preferred shares with cumulative preferred dividends of BASF Canada Inc. of 1978, redeemable 1985	45.4	55.5
9¼% U. S. Dollar Bonds of BASF Finance Europe of 1979, due 1983	58.8	52.0
7½% French Franc Bonds of BASF Transatlantica S. A. of 1972, due 1974–1987	24.5	24.4
8¼% Swiss Franc Bonds of BASF Overzee N. V. of 1975, due 1985	22.2	21.7
Various promissory notes, insurance loans, bonds and mortgages at 5¼–10¼% interest, maturing serially between 1965–2002	363.7	335.3
	1,056.5	1,041.1

8½% Bonds with detachable stock warrants of 1974/1986:

Each 8½% bond with a nominal value of DM 300 (smallest denomination) has 2 detachable stock warrants granting the right to purchase for each of these 1.05 shares of capital stock of BASF Aktiengesellschaft at a price of DM 117.60 per share or a total of up to 2,799,955 shares at a nominal value of DM 50 at December 31, 1980. The right expires on May 31, 1986.

Fixed assets of DM 259.1 million and DM 258.1 million in 1980 and 1979, respectively, were pledged as collateral to long-term liabilities.

The interest rates of long-term bank loans, excluding South American

borrowings, are between 6 and 14 percent.

Other long-term liabilities consist principally of amounts due to employee benefit organizations.

The short-term portions of all long-term liabilities amounting to DM 131.6 million and DM 317.2 million at December 31, 1980 and 1979, respec-

tively, are classified with the appropriate current liabilities.

The maturities of all long-term liabilities from 1982 through 1985 are as follows:

	million DM
1982	420.6
1983	274.7
1984	152.3
1985	167.3

Short-term liabilities to banks

This caption includes short-term bank borrowings plus current maturities of long-term liabilities to banks amounting to DM 83.9 million and DM 110.0 million in 1980 and 1979, respectively. In addition, the unused lines of credit aggregated DM 364.8 million and DM 678.0 million at December 31, 1980 and 1979, respectively. The maximum amount of short-term bank borrowings in 1980 was DM 1,888.9 million. The weighted average effective interest rate for such borrowings as of December 31, 1980 was 14.3 percent, excluding South American borrowings, and 30.0 percent including such borrowings.

Research and development

Research and development costs are charged to operations as incurred. Such expenses amounted to DM 992.8 million in 1980 and DM 891.8 million in 1979.

Pension plans

In accordance with legal requirements, employees in various countries are covered by compulsory insurance laws. Employees of certain companies are also entitled to pensions provided by company agreements. These latter pension benefits have been adequately provided for in accordance with actuarial computations or by company-sponsored old age employee benefit organizations. In the case of certain foreign companies the amounts are funded through pension funds or insurance contracts. The total cost of compulsory insurances and the various pension plans amounted to DM 865.0 million in 1980 and DM 841.8 million in 1979.

Other expense (net)

Other expense (net) in the 1980 Statement of Income of the BASF Group includes, at the respective DM amount, charges in the amount of US \$ 74.5 million, from the decision of BASF Wyandotte Corporation to close certain production facilities.

Income taxes

Income taxes include corporation tax, trade income tax or similar income-related taxes and are provided on the basis of taxable income, taking into account any loss carryforwards of individual companies as prescribed by local tax statutes. Taxes on oil producing operations, payable in certain countries at rates of up to 84 percent of taxable income in those countries, are included in income tax expense; such taxes amounted to DM 388.0 million in 1980 and DM 256.3 million in 1979. Property tax, trade capital tax, real estate tax or similar non-income related taxes are not included as income taxes but as operating costs.

Source and application of funds

Source and application of funds of the BASF Group is shown under "Finance" on page 4.

Contingent liabilities and commitments

There are various pending legal actions arising in normal business operations for which adequate provisions have been made. Also in the ordinary course of business, the companies have incurred contractual commitments pursuant to terms of leases and other contracts or pension plans, and are contingently liable as guarantor or endorser of notes. Adequate provision has been made for any losses and uncertain liabilities which may be reasonably foreseen.

In his New York studio a famous designer created a successful line of fashionable sleepwear using Vivana[®], a fabric knitted out of Zefran[®] nylon fiber of Badische Corporation, an affiliate.



1980 Financial Statement
BASF Aktiengesellschaft and Consolidated German Subsidiaries
Consolidated Balance Sheet as of December 31, 1980

Assets	Dec. 31, 1980 DM	Dec. 31, 1979 1,000 DM
I. FIXED ASSETS		
A. TANGIBLE AND INTANGIBLE		
1. Real estate and equivalent rights with commercial or industrial buildings	1,147,910,245	1,159,322
2. Real estate and equivalent rights with residential buildings	186,126,195	191,472
3. Real estate and equivalent rights without buildings	131,238,523	128,988
4. Buildings on land owned by others not included under 1. or 2. above	39,408,070	36,471
5. Machinery, plant and equipment	2,387,639,423	2,366,194
6. Office equipment	372,644,851	361,677
7. Plant under construction and advances for plant	566,558,143	553,592
8. Concessions, trademarks, similar rights and licenses	1,929,608	2,485
	4,833,455,058	4,800,201
B. INVESTMENTS		
1. Affiliated companies	1,967,782,864	1,918,063
2. Securities	416,287	1,087
3. Loans for a term of at least four years (DM 87,767,109 secured by mortgages)	148,305,482	107,870
	2,116,504,633	2,027,020
C. BALANCE ARISING FROM CONSOLIDATION	374,503,194	361,190
	7,324,462,885	7,188,411
II. CURRENT ASSETS		
A. GOODS ON LEASE	53,364,709	47,005
B. INVENTORIES	2,853,610,555	2,396,743
C. UNCOMPLETED CONTRACTS	190,400,823	165,445
D. OTHER CURRENT ASSETS		
1. Advances paid	12,905,906	14,139
2. Accounts receivable-trade (DM 4,346,890 with a residual term of more than one year)	2,191,819,671	2,116,198
3. Notes receivable (DM 22,693,901 rediscountable at the Federal Bank)	125,439,860	87,847
4. Checks	—	94
5. Cash on hand, balances at the Federal Bank and in postal checking accounts	4,073,336	4,845
6. Cash in banks	369,960,208	572,408
7. Securities	83,636,322	128,897
Subtotal items 4–7: cash and cash items	457,669,866	706,244
8. Accounts receivable from affiliates	598,108,597	538,520
9. Receivables resulting from loans granted under or according to § 89 AktG (corporation law)	4,751,351	6,277
10. Other current assets	283,221,139	201,203
	6,771,292,477	6,279,621
III. DEFERRED CHARGES AND PREPAID EXPENSES		
1. Discounts	151,338	208
2. Others	11,358,752	12,377
	11,510,090	12,585
	14,107,265,452	13,480,617

Capital and Liabilities	Dec. 31, 1980 DM	Dec. 31, 1979 1,000 DM
I. CAPITAL STOCK Par value of conditionally authorized but unissued shares DM 445,805,950	1,997,970,850	1,970,956
II. SURPLUS INCLUDING CONSOLIDATED PROFIT *		
1. Capital surplus	1,780,677,399	1,740,501
2. Earned surplus including consolidated profit	2,134,129,425	1,989,233
	3,914,806,824	3,729,734
EQUITY OF BASF AKTIENGESELLSCHAFT AND ITS CONSOLIDATED GERMAN SUBSIDIARIES	5,912,777,674	5,700,690
* of which: legal reserve of BASF Aktiengesellschaft	DM 1,585,559,074	
free reserve of BASF Aktiengesellschaft	DM 1,201,000,000	
consolidated profit	DM 508,978,539	
III. MINORITY INTERESTS		
1. Capital	114,464,770	116,304
2. Profit	13,533,991	12,835
	127,998,761	129,139
IV. SPECIAL RESERVES (according to § 6b EStG, § 7c EStG (income tax law), section 35 EStR (income tax regulations), § 74 EStDV (income tax directive), § 1 EntwStG (developing countries tax law), § 3 AuslInvG (German foreign investment law))	676,208,927	659,183
V. GENERAL RESERVES FOR ACCOUNTS RECEIVABLE	73,329,560	70,753
VI. ACCRUALS		
1. Pension	2,212,254,375	2,001,501
2. Deferred maintenance	26,894,500	23,851
3. Others	1,621,547,340	1,553,010
	3,860,696,215	3,578,362
VII. LIABILITIES FOR A TERM OF AT LEAST FOUR YEARS		
1. Bonds (DM 3,202,800 secured by mortgages)	331,713,100	354,083
2. Debentures (DM 23,800,000 secured by mortgages)	41,300,000	61,440
3. Liabilities to banks (DM 64,329,170 secured by mortgages)	96,374,770	112,766
4. Loans from BASF Employees' Pension Fund (DM 28,637,236 secured by mortgages)	354,299,302	286,303
5. Others (DM 8,642,359 secured by mortgages)	8,917,358	20,933
Of the amounts included in items 1–5 DM 259,417,788 are due within less than four years	832,604,530	835,525
VIII. OTHER LIABILITIES		
1. Accounts payable-trade	1,176,912,793	1,127,459
2. Notes payable	10,529,000	25,462
3. Liabilities to banks	8,845,897	12,760
4. Advances received	230,573,396	222,397
5. Payables to affiliates	551,423,262	499,763
6. Others	644,829,155	618,489
	2,623,113,503	2,506,330
IX. DEFERRED INCOME	536,282	635
	14,107,265,452	13,480,617
1. Liabilities from the issue and endorsement of bills	381,356,922	425,194
2. Liabilities from guarantees	840,469,686	847,737
3. Liabilities from warranties	70,850,302	71,042

BASF Aktiengesellschaft and Consolidated German Subsidiaries
Statement of Consolidated Income
for the Year Ended December 31, 1980

	1980 DM	DM	1979 1,000 DM	1,000 DM
1. Sales	21,736,995,924		20,497,891	
2. Cost of materials (including changes in inventories) and other charges (net) not shown separately below	14,523,097,784	7,213,898,140	13,051,755	7,446,136
3. Income from profit transfer agreements from companies not consolidated	29,411,614		69,712	
4. Income from subsidiaries and affiliates not consolidated	120,560,245		62,131	
5. Income from other investments	3,619,764		2,345	
6. Other interest and similar income	97,133,020		82,185	
7. Valuation adjustments of plant property and investments	5,516,798		4,605	
8. Reversal of accruals	70,044,237		45,773	
9. Other income	496,198,407	822,484,085	385,779	652,530
		8,036,382,225		8,098,666
10. Wages and salaries	3,781,126,025		3,596,387	
11. Compulsory social security	556,367,342		524,135	
12. Pensions and assistance	402,416,366		411,516	
13. Depreciation of tangible and intangible fixed assets	1,140,032,075		1,141,074	
14. Write-downs and other valuation adjustments of investments	106,897,154		4,296	
15. Interest and similar expenses	130,950,235		155,650	
16. Taxes				
a) on income and property	619,612,514		912,866	
b) others	820,251,176		813,981	
	1,439,863,690		1,726,847	
17. Equalization of Burdens Property Levy	—		3,985	
18. Transfer of losses of affiliates not consolidated	355,058	7,558,007,945	377	7,564,267
19. Net income for the year		478,374,280		534,399
20. Profit carryforward		131,971,847		54,370
		610,346,127		588,769
21. Transfers from surplus		—		54
		610,346,127		588,823
22. Transfers to surplus		87,833,597		124,785
		522,512,530		464,038
23. Minority interests in income		13,533,991		12,833
24. Consolidated Profit		508,978,539		451,203

The statement of accounts and the report to shareholders follow all legal requirements according to our obligatory examination.

Schitag
Schwäbische Treuhand-Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft
(Certified Public Accountants – Tax Consultants)

Dr. Frey
Wirtschaftsprüfer
(Certified Public
Accountant)

ppa. Heydkamp
Wirtschaftsprüfer
(Certified Public
Accountant)

Stuttgart, April 7, 1981

Notes to the 1980 Financial Statements of BASF Aktiengesellschaft and Consolidated German Subsidiaries

The subsidiaries of BASF Aktiengesellschaft located in Germany are listed on pages 38 as well as on this and the following page.

Any subsidiaries of BASF Aktiengesellschaft that have not been mentioned specifically in this report, are not material in relation to the consolidated financial position and operations.

Changes in the scope of consolidation

Deltaplast Kunststoff-Technik GmbH founded on February 25, 1980 by Elastogran GmbH has been included in the consolidation of BASF Aktiengesellschaft and its consolidated subsidiaries.

In addition, the number of consolidated companies decreased by 6 due to reorganizations; however, this has no effect on the scope and content of the consolidated financial statements.

<i>Subsidiaries not included in the consolidation because of their minor significance according to § 329 (2), sentence 2, AktG (corporation law):</i>		Nominal Capital 1,000 DM	Percent Ownership
Subsidiaries of			
BASF Aktiengesellschaft, Ludwigshafen:			
– BASF Handels- und Export-Gesellschaft mbH, Ludwigshafen*		3,000	100 ¹
– BASF Terratec GmbH, Ludwigshafen*		20	100 ¹
– Gewerkschaft des konsolidierten Steinkohlenbergwerks Breitenbach, Ludwigshafen	mining shares	100	100 ¹
– Dr. Wolman GmbH, Sinzheim		660	100 ²
Subsidiaries of			
BASF Farben + Fasern AG, Hamburg:			
– Glasurit GmbH, Hamburg*		100	100 ³
– Herbol GmbH, Cologne*		100	100 ³
Subsidiary of			
BASF Handels- und Export-Gesellschaft mbH, Ludwigshafen:			
– TENSID-CHEMIE Vertriebsgesellschaft mbH, Dueren		200	100 ²
Subsidiary of			
Chemikalien-Aktiengesellschaft, Frankfurt/Main:			
– Land- und Forstflug Aviochemie GmbH, Muenster		50	100 ²
Subsidiaries of			
Gewerkschaft Auguste Victoria, Marl:			
– Gewerkschaft Röchling, Marl*	mining shares	1,000	100 ¹
– Kohlen-Handelsgesellschaft Auguste Victoria OHG, Marl		•	100 ^{1**}
Subsidiaries of			
Kali und Salz AG, Kassel:			
– Deutscher Straßen-Dienst			
– H. Dauppert GmbH, Kassel*		100	100 ²
– Gewerkschaft Beienrode, Koenigslutter	mining shares	5,000	89.94 ²
– Gewerkschaft Salz-Jerxheim, Hanover	mining shares	100	74 ¹
– Kali-Transport Gesellschaft mbH, Hamburg*		4,000	100 ²
– Kali-Union Verwaltungsgesellschaft mbH, Kassel*		1,500	100 ²
– Montangesellschaft mbH, Cologne*		1,155	100 ²
– SAWIKO Salzvertriebsgesellschaft mbH, Kassel		100	100 ²
– Wohnbau Salzdetfurth GmbH, Bad Salzdetfurth*		3,500	100 ²
Subsidiaries of			
Nordmark-Werke GmbH, Hamburg:			
– IFAH GmbH, Hamburg*		20	100 ¹
– Stormarn-Verlag GmbH, Uetersen*		5	100 ²
– Täberg Grundstücks-Gesellschaft mbH, Hamburg*		1,330	100 ²
– Vitamultina Pharmazeutische Präparate GmbH, Hamburg*		20	100 ¹
Subsidiaries of			
Wintershall AG, Celle/Kassel:			
– Erdöl-Raffinerie Franken GmbH, Eggolsheim*		8,500	100 ²
– Gewerkschaft Uchte, Uchte*	mining shares	100	100 ²
– Gewerkschaft Ummendorf, Kassel	mining shares	100	100 ^{2**}
– Mineralöl-Lager- und Transport-Gesellschaft mbH, Kassel		10,020	100 ²
– Untertage-Speicher-Gesellschaft mbH, Nordenham		20,000	100 ^{2**}
Subsidiary of			
Fritzsche Dodge & Olcott, Inc., New York:			
– Fritzsche Dodge & Olcott GmbH, Bad Oeynhausen		1,100	100 ²

* profit transfer agreement with parent company

** including the holdings of other BASF Group companies

¹ inactive companies

² companies with insignificant operations, having no effect on the consolidated financial position

³ managing companies

Notes to the 1980 Financial Statements of BASF Aktiengesellschaft and Consolidated German Subsidiaries

<i>Subsidiaries not included in the consolidation because their inclusion would impair the value of disclosures in the statement in view of the social activities of these companies, in accordance with § 329 (2), sentence 3, AktG (corporation law):</i>	Nominal Capital 1,000 DM	Percent Owner- ship
(In accordance with the by-laws of these companies a distribution of net assets to the owners is not permitted in case of liquidation)		
Subsidiaries of BASF Aktiengesellschaft, Ludwigshafen:		
– BASF-Altershilfe GmbH, Ludwigshafen	20	100*
– GEWOGE Gemeinnütziges Wohnungsunternehmen GmbH, Ludwigshafen	30,000	97
Subsidiary of Nordmark-Werke GmbH, Hamburg:		
– Unterstützungskasse "Nordmark-Werke" GmbH, Uetersen	20	100

* including the holdings of other BASF Group companies

Additional information

The results of major foreign affiliates not included in the consolidation of BASF Aktiengesellschaft and its consolidated subsidiaries are shown under Major Affiliates/Abroad, pages 40 to 43. Of the affiliates in the consolidation which are not named, BASF Venezolana S. A., Caracas, incurred a greater loss. It amounted to about 28.4 million Bolívars.

Consolidated balance sheet

The consolidated data represent largely the activities of BASF Aktiengesellschaft; for this reason we refer to the Notes to the Financial Statements of BASF Aktiengesellschaft. Thus the following describes only significant matters relating to consolidation.

Inter-company profits as well as sales, expenses and earnings between the consolidated companies were eliminated. That applies also to receivables from and liabilities to companies included in the consolidation.

Balance arising from consolidation represents the difference between the costs of acquisition of subsidiaries and the BASF share in its equity at the time of acquisition. Debit and credit balances are netted.

The debit balances represent the acquired goodwill amounts and the excess of the current value over the book value of the assets of affiliates. If material to the consolidated income, they are reduced by the interim write-offs on the affiliates due to permanent diminution of value.

The credit excesses represent primarily accounts in connection with acquisition of affiliates by shares, when such shares were valued at the nominal value using optional valuation methods as permitted by the German corporation law.

Capital stock and surplus

The capital surplus comprises the premium from increases in capital allocated to the legal reserve and the reserve resulting from the decartelization of IG Farbenindustrie Aktiengesellschaft. The earned surplus includes the reserves of BASF Aktiengesellschaft, having been transferred from earnings, and the earned, but undistributed earnings of the companies included in the consolidation after the date of their acquisition.

Contingent liabilities not shown in the balance sheet, including collateral given for consolidated companies, relate principally to BASF Aktiengesellschaft (see Notes to the respective Statements).

As a guarantee for liabilities of BASF Aktiengesellschaft to BASF Employees' Health Insurance, LUWOG Wohnungsunternehmen GmbH has registered a land charge. The amount guaranteed totaled DM 7,300,000 on December 31, 1980.

Gewerkschaft Auguste Victoria has a contingent liability for obligations of various cooperative ventures of the mining industry.

Wintershall AG gave crude throughput guarantees to Société du Pipeline Sud-Européen and to Deutsche Transalpine Ölleitung GmbH and is liable for unpaid subscriptions of partners according to § 24 GmbH-Gesetz (law for limited liability companies).

Statement of consolidated income

Other taxes relate primarily to taxes on petroleum products to be paid by the Wintershall group.

Net income for the year consists of the net income of the companies included in the consolidation less consolidation adjustments.

The profit carryforward represents profits and losses carried forward of the included companies after the date of their acquisition and consolidation adjustments.

The increase refers to the elimination of profit payout within the consolidation from the previous year's results.

Transfers to surplus reserves result from the individual Financial Statements of BASF Aktiengesellschaft, the Wintershall group, BASF Farben + Fasern AG, Knoll Aktiengesellschaft, COMPO GmbH and transfers within the consolidated companies in connection with consolidation adjustments.

Minority interests in net income comprise mainly minority interests in the net income of Guano-Werke Aktiengesellschaft, Kali und Salz AG and Knoll Aktiengesellschaft.

1980 Financial Statement
Balance Sheet of BASF Aktiengesellschaft as of December 31, 1980

	Jan. 1, 1980	Additions Valuation adjustments*	Transfers	Deductions (Retirements)	Deprecia
Assets	DM	DM	DM	DM	
I. FIXED ASSETS					
A. TANGIBLE AND INTANGIBLE					
1. Real estate and equivalent rights with commercial or industrial buildings	755,437,477	56,362,810	+ 26,430,299	2,135,412	89,603,
2. Real estate and equivalent rights with residential buildings	2,608,169	14,181	+ 302	—	254,
3. Real estate and equivalent rights without buildings	99,392,260	6,598,194	+ 162,418	1,019,195	1,244,
4. Buildings on land owned by others not included under 1. or 2. above	1,468,630	92,001	+ 31,028	44,332	556,
5. Machinery, plant and equipment	1,730,056,388	293,425,704	+ 304,078,036	12,799,935	561,019,
6. Office equipment	222,362,098	88,171,618	+ 19,981,069	1,889,364	106,555,
7. Plant under construction and advances for plant	415,147,924	365,855,691	(350,683,152)	—	5,147,
8. Concessions, trademarks, similar rights and licenses	1	—	—	—	—
	3,226,472,947	810,520,199	—	17,888,238	764,382,
B. INVESTMENTS					
1. Affiliated companies	2,765,789,472	378,774,599	—	244,644,947	91,097,
2. Loans for a term of at least four years (DM 52,910,325 secured by mortgages)	60,338,418	53,771,412	—	13,705,508	8,185,
		3,239,742*			
	2,826,127,890	432,546,011	—	258,350,455	99,282,
		3,239,742*			
	6,052,600,837	1,243,066,210	—	276,238,693	863,664,
		3,239,742*			
II. CURRENT ASSETS					
A. GOODS ON LEASE					
B. INVENTORIES					
1. Raw materials and supplies					
2. Finished products, merchandise					
C. UNCOMPLETED CONTRACTS					
D. OTHER CURRENT ASSETS					
1. Advances paid					
2. Accounts receivable-trade (DM 1,636,124 with a residual term of more than one year)					
3. Notes receivable (DM 18,398,029 rediscountable at the Federal Bank)					
4. Cash on hand					
5. Cash in banks					
6. Securities					
Subtotal items 4–6: cash and cash items					
7. Accounts receivable from affiliates					
8. Receivables resulting from loans granted under § 89 AktG (corporation law)					
9. Other current assets					
III. DEFERRED CHARGES AND PREPAID EXPENSES					

Dec. 31, 1980 Dec. 31, 1979

DM 1,000 DM

746,491,650 755,438
 2,368,414 2,608
 103,888,706 99,392

990,583 1,469
 1,753,741,097 1,730,056
 222,069,696 222,362
 425,172,691 415,148
 1 (1.-)

3,254,722,838 3,226,473

2,808,821,808 2,765,789
 95,458,692 60,339

2,904,280,500 2,826,128

6,159,003,338 6,052,601

53,364,709 47,005

411,265,623 376,129
 1,190,726,580 1,114,498

1,601,992,203 1,490,627
 148,538,399 136,037

3,645,730 4,637
 1,144,865,908 1,170,879

113,546,029 71,709

473,043 378
 280,717,210 482,800
 58,654,336 101,979

339,844,589 585,157
 578,016,358 540,814

3,016,778 4,625
 142,203,147 98,150

4,129,033,850 4,149,640

5,447,454 6,345

0,293,484,642 10,208,586

Dec. 31, 1980 Dec. 31, 1979

Capital and Liabilities

DM 1,000 DM

I. CAPITAL STOCK 1,997,970,850 1,970,956
 Par value of conditionally authorized but
 unissued shares DM 445,805,950

II. SURPLUS
 1. Legal reserve (as of Jan. 1, 1980 / Jan. 1, 1979) 1,545,383,074 1,487,783
 Transfer from the premium of capital stock
 increases 40,176,000 57,600

1,585,559,074 1,545,383
 2. Free reserve (as of Jan. 1, 1980 / Jan. 1, 1979) 1,151,000,000 1,061,000
 Transfer from net income 50,000,000 90,000

1,201,000,000 1,151,000

2,786,559,074 2,696,383

III. SPECIAL RESERVES 219,036,693 274,966
 (according to § 6b EStG, § 7c EStG (income
 tax law), § 74 EStDV (income tax directive),
 section 35 EStR (income tax regulations),
 § 1 EntwStG (developing countries tax law) and
 § 3 AuslInvG (German foreign investment law))

IV. GENERAL RESERVES FOR ACCOUNTS
 RECEIVABLE 51,172,000 51,205

V. ACCRUALS
 1. Pension 1,486,268,895 1,364,060
 2. Deferred maintenance 14,000,000 18,000
 3. Others 605,298,033 577,609
 2,105,566,928 1,959,669

VI. LIABILITIES FOR A TERM OF AT LEAST
 FOUR YEARS
 1. Bonds
 a) 5% Bonds of 1959/84 1,744,300 11,056
 b) 8½% Bonds with warrants attached of 1974/86 328,510,300 338,500

330,254,600 349,556
 2. Debentures 17,500,000 30,000
 3. Liabilities to banks 11,022,893 21,781
 4. Loans from BASF Employees' Pension Fund 325,662,126 257,178
 5. Others 16,999 257

Of the amounts included in items 1-5
 DM 196,615,239 are due within less
 than four years 684,456,618 658,772

VII. OTHER LIABILITIES
 1. Accounts payable-trade 584,054,463 615,138
 2. Notes payable 10,119,000 25,175
 3. Advances received 179,354,834 178,380
 4. Payables to affiliates 1,020,951,490 1,113,267
 5. Others 374,518,489 349,281
 2,168,998,276 2,281,241

VIII. PROFIT AVAILABLE FOR DIVIDEND 279,724,203 315,394

10,293,484,642 10,208,586

1. Liabilities from the issue and endorsement of bills 301,752,670 354,324
 2. Liabilities from guarantees 697,793,373 760,959
 3. Liabilities from warranties 48,820,860 56,541

**Statement of Income of BASF Aktiengesellschaft
for the Year Ended December 31, 1980**

	1980 DM	DM	1979 1,000 DM	1,000 DM
1. Sales	12,490,959,066		12,134,200	
2. Increase in inventories of finished and semi-finished goods and products on lease	67,941,375	12,558,900,441	289,841	12,424,041
3. Other company-manufactured capitalized items		154,065,397		191,709
4. Total		12,712,965,838		12,615,750
5. Costs of raw materials, supplies and purchased merchandise not shown separately below		6,724,463,006		6,388,877
6. Balance (gross profit)		5,988,502,832		6,226,873
7. Income from profit transfer agreements	7,195,110		52,808	
8. Income from affiliates	236,250,377		122,134	
9. Income from other investments	867,965		103	
10. Other interest and similar income	90,614,818		78,630	
11. Gains from sale of plant property and equipment and valuation adjustments	84,668,018		6,250	
12. Gains from the decrease of general reserves for accounts receivable	33,000		—	
13. Reversal of accruals	37,412,811		30,500	
14. Transfers from special reserves	97,769,892		29,804	
15. Other income	172,556,288		203,476	
non-recurring: DM 12,507,996		727,368,279	(25,081)	523,705
		6,715,871,111		6,750,578
16. Wages and salaries	2,437,374,205		2,339,340	
17. Compulsory social security	314,512,403		296,978	
18. Pensions and assistance	253,916,595		293,751	
19. Depreciation of tangible fixed assets	764,382,070		776,830	
20. Write-downs and other valuation adjustments of investments	99,282,688		3,986	
21. Valuation adjustments on current assets other than inventories and general reserves for accounts receivable	14,500,187		27,896	
22. Losses on retirement of fixed assets	24,937,509		16,939	
23. Interest and similar expenses	185,086,922		178,779	
24. Taxes				
a) on income and property	414,274,346		586,055	
b) others	9,065,395		11,393	
	423,339,741		597,448	
25. Equalization of Burdens Property Levy	—		2,667	
26. Transfer of losses of affiliates	6,343,290		6,708	
27. Transfer to special reserves	41,840,748		88,156	
28. Other expenses	1,820,672,092	6,386,188,450	1,716,286	6,345,764
29. Net income for the year		329,682,661		404,814
30. Net income carried forward from prior year		41,542		580
		329,724,203		405,394
31. Transfer to free reserves		50,000,000		90,000
32. Profit available for dividend		279,724,203		315,394

Pension paid including payments to legally independent pension funds

a) in 1980 DM 130,291,923

b) anticipated in the next five years: 103 percent, 106 percent, 110 percent, 115 percent, 119 percent of the amount specified under (a)

The statement of accounts and the report to shareholders follow all legal requirements according to our obligatory examination.

Schitag
Schwäbische Treuhand-Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft
(Certified Public Accountants – Tax Consultants)

Dr. Frey
Wirtschaftsprüfer
(Certified Public
Accountant)

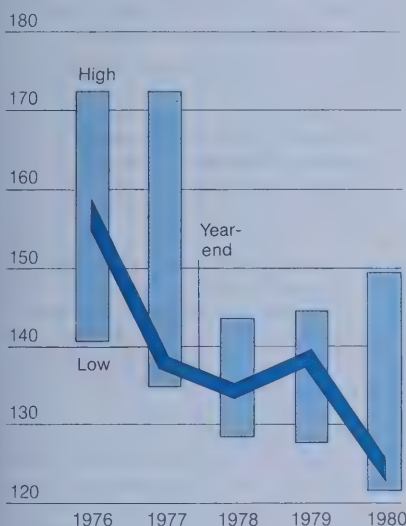
ppa. Schneck
Wirtschaftsprüfer
(Certified Public
Accountant)

Stuttgart, April 7, 1981

Notes to the 1980 Financial Statements of BASF Aktiengesellschaft

BALANCE SHEET

BASF STOCK INDEX



BASF SHARES

DM quotation per share, par value DM 50. Adjusted for the capital increase in January 1977.

BASF shares are quoted on German stock exchanges in Frankfurt/Main, Berlin, Bremen, Duesseldorf, Hamburg, Hanover, Munich and Stuttgart. Abroad they are listed on stock exchanges in Zurich, Basel, Geneva, Paris, Brussels, Antwerp, Amsterdam, Vienna and London. For 1976–1980 the graph shows the highest, lowest and year-end quotations for BASF shares on the Frankfurt stock exchange.

ASSETS

I. Fixed assets

A. Tangible and intangible fixed assets

1.–7. *Property, plant and equipment* is stated at acquisition or production costs reduced by regular depreciation and special write-offs. In addition to material and wages, the construction costs for plants built by ourselves include costs of the allocated overheads of the production sector, based on tax requirements, and the straight-line depreciation. In general, movable property is depreciated under the declining balance method, immovable property under the straight-line method. The declining balance method is used for movable property and switched to the straight-line method when appropriate. Additions to assets of low value were written off as incurred.

Retirements comprise mainly residual book values of fixed assets scrapped or sold. Depreciation of property, plant and equipment, which reflects maximum benefits permitted by tax regulations, consists of:

Depreciation of additions, including transfers from plant under construction, consists of:	Additions and Transfers million DM	Depreciation million DM
1. Real estate and equivalent rights with commercial or industrial buildings	83.3	12.6
2. Real estate and equivalent rights with residential buildings	0.2	0.1
3. Real estate and equivalent rights without buildings	6.6	1.3
4. Buildings on land owned by others, not included in 1. or 2. above	0.1	—
5. Machinery, plant and equipment	597.9	120.6
6. Office equipment	107.2	40.0
7. Plant under construction and advances for plant	15.2	4.7
Total	810.5	179.3

Of the approximately 1723 hectare real estate, about 15 hectare are subject to hereditary leasing rights.

8. The *intangible fixed assets* are stated, as heretofore, at the nominal value of DM 1.

million DM	1980	1979
<i>Regular depreciation:</i>		
Declining balance method and straight-line method	680.3	629.7
Write-offs of low-value assets	23.2	23.3
	703.5	653.0
<i>Special write-offs:</i>		
Protection of water and air environment, noise reduction and waste disposal	55.9	85.7
Investments in areas bordering on the German Democratic Republic according to § 3 ZonenRFG	—	3.1
Transfer of gains on sales in accordance with § 6b EStG (income tax law)	1.3	0.9
Other special write-offs	3.7	34.1
	60.9	123.8
Total	764.4	776.8

B. Investments

1. *Investments in affiliated companies* are stated at cost of acquisition. In case of permanent diminution of value, special depreciation was made.

Additions relate to the acquisition of Fritzsche Dodge & Olcott, Inc., New York, in the amount of DM 232.6 million and to capital increases: of DM 37.3 million to BASF America Corporation, New York; of DM 32.9 million to BASF Finance Europe N. V., Arnhem; of DM 9.2 million to BASF Video Corporation, Fountain Valley; of DM 8.6 million to BASF Brasileira S. A., Indústrias Químicas, São Paulo; of DM 8.0 million to Suma S. A., Gien, Loiret; of DM 8.0 million to BASF de México, S. A. de C. V., México; of DM 5.1 million to BASF Argentina S. A., Buenos Aires; of DM 4.9 million to BASF Química Colombiana S. A., Bogotá; of DM 3.7 million to BASF Química da Bahia S. A., Camacari-Bahia; of DM 2.7 million to BASF Japan Ltd., Tokyo; of DM 1.3 million to BASF Venezolana S. A., Caracas; as well as to some affiliates in Africa, South and East Asia and Australia. The remaining additions relate to the purchase of additional shares in Knoll Aktiengesellschaft, Ludwigshafen, as well as the founding of Hyosung-BASF Company, Ltd., Seoul, Republic of South Korea, and BASF New Zealand Ltd., Auckland.

Retirements relate to the sale of our holdings of DM 173.2 million in Röhm GmbH, Darmstadt, of DM 3.2 million in Resinkem (Proprietary) Ltd., Umbogintwini and of DM 0.7 million in Henry H. York & Co. Ltd., Petone, to the transfer of BASF Overzee N. V., Willemstad, in the amount of DM 41.8 million to BASF Finance Europe N. V., Arnhem, as well as to the decrease in the capitalization of BASF Video Corporation, Fountain Valley, by US \$ 14.2

million; this company is now carried at a book value of DM 1. Write-offs cover necessary adjustments of investment values of BASF Venezolana S. A., Caracas, and a smaller affiliate each in France and Argentina due to permanent diminution of value. The gain realized in the sale of our shares in Röhm GmbH, Darmstadt, was transferred to our new investment in Fritzsche Dodge & Olcott, Inc., New York, as permitted by § 4 of the German foreign investment law.

2. *Loans for a term of at least four years* are predominantly loans for housing granted to employees. Non-interest bearing loans are depreciated to the present value; the increase of the present values is reflected in additions.

II. Current assets

A. Products on lease

Includes computer peripheral equipment and media on lease. Such goods are valued at acquisition or production costs, or at a lower value as permitted by tax laws.

B. Inventories

Compared to the preceding year, inventories increased by DM 111.4 million, mainly because of higher petrochemical raw material prices.

1. *Raw materials and supplies* are valued at the lower of cost or market taking into account any write-downs as permitted by tax law. Adequate provision has been made for risks due to technical obsolescence and diminution of quality.

2. *Finished products and goods for resale* have been valued at production or acquisition cost, however, not in excess of realizable value, less an allowance for storage and an average profit margin. Production costs are based on the normal capacity of the production plants and include, in addition to the actual production costs, the allocated overheads of the respective production centers, based on tax requirements, and the allocated straight-line depreciation on plant and equipment. Provisions for sales risks and obsolescence have been adequately taken into account.

C. Uncompleted contracts

Uncompleted contracts comprise expenditures incurred for plants constructed for third parties at home and abroad. They are valued at the lower of acquisition cost or market.

D. Other current assets

1. *Advances paid* are stated at acquisition cost, excluding turnover tax resulting from the revised turnover tax law.

2. *Accounts receivable-trade* are slightly lower than in the preceding year.

The average grace period decreased insignificantly compared to the previous year. Valuation adjustments for special risks have been taken into account.

3. *Notes receivable* consist almost exclusively of foreign drafts with terms of more than 90 days in general. They are carried at cash value and have been secured against risks.

5. *Cash in banks* represents balances payable on demand.

6. Our portfolio of *securities* consists exclusively of fixed-interest bearing papers. They are carried at the lower of cost or market.

7. *Accounts receivable from affiliates* include accounts receivable-trade, interest and non-interest bearing loans and notes receivable.

9. *Other current assets* include substantially refunds, registered bonds and claims, deferred claims on interest discounts, short-term loans granted to employees and advances.

III. Deferred charges and prepaid expenses

This item relates primarily to prepaid rent, insurance, interest and other expenses insofar as they are carried as expenses in subsequent years.

CAPITAL AND LIABILITIES

I. Capital stock

On December 15, 1980 the capital stock was increased by DM 27,000,000 from authorized capital by the issue of 540,000 bearer shares at a nominal value of DM 50 each, entitled to dividend as of January 1, 1980 at an issue price of DM 124.40, the legal subscription privilege being overruled. These shares were subscribed to by Deutsche Bank AG and reserved for employees of the BASF Group.

From the conditional capital, shares in the nominal value of DM 15,250 were issued to continue the satisfaction of compensation claims of former Wintershall shareholders in connection with the inclusion of Wintershall AG into the BASF Group. Hereafter, the capital stock totaled DM 1,997,970,850, the authorized capital DM 191,000,000 and the conditional capital DM 445,805,950.

The Board of Executive Directors is authorized to increase the capital stock by the issue of new shares in the amount of up to DM 191,000,000 against contributions in money or kind (authorized capital) until June 1, 1982 with approval of the Supervisory Board. The Board of Executive Directors is entitled to overrule the subscription privilege of shareholders.

Of the conditional capital, DM 42,808,200 are reserved for the continuation of the Wintershall transaction; however, only DM 40,450 will actually be required. DM 63,000,000 secure the option rights of the holders of the US \$ 75 million bond of BASF Overzee N. V. of 1969/80; the option right expired December 15, 1980.

DM 139,997,750 are reserved for the conversion rights of the bonds with warrants attached of 1974/86.

Additional DM 200,000,000 are exclusively reserved to secure the option rights on BASF shares, in case the Board of Executive Directors issues optional debentures as authorized by a decision of the stockholders at their annual meeting on June 26, 1980.

II. Surplus

1. The change in the *legal reserve* represents the addition of the premium from the capital stock increase from the authorized and conditional capital.

2. The *free reserve* was increased by DM 50,000,000 by transfer from income.

III. Special reserves

The special reserves consist of the following amounts:

	million DM
Valuation adjustments on non-interest bearing loans granted prior to January 1, 1955, according to § 7 c EStG (income tax law)	2.0
Reserves for price increases as permitted under § 74 EStDV (income tax directive)	151.4
Reserves for replacements according to Section 35 EStR (income tax guide)	0.1
Capital gains according to § 6 b EStG	0.4
Reserves according to § 3 AuslInvG (foreign investment law)	9.0
Allowances for capital investments in developing countries, as permitted under § 1 Entwicklungshilfe- (development aid tax law) and Entwicklungsländer-Steuerergesetz (developing countries tax law)	56.1
	219.0

V. Accruals

1. *Accruals for pensions* have been computed on an actuarial basis according to the discounted value method.

3. *Miscellaneous accruals* are made for risks in sales and purchases, for lawsuits as well as for other obligations and taxes.

The accruals are deemed to be amply sufficient.

VI. Liabilities with a term of at least four years

1.-3. The decrease results from regular and premature redemptions.

1.-5. Current maturities of *liabilities for a term of at least four years* amount to about DM 15 million.

VII. Other liabilities

1. *Accounts payable-trade* decreased by approximately DM 31 million.

2. *Notes payable* in the amount of DM 10.1 million relate to financing of third parties' facilities abroad.

3. *Advances received* consist primarily of partial payments, exclusive of turnover tax, on uncompleted facilities (uncompleted contracts) being built for third parties inside and outside Germany.

4. *Payables to affiliates* comprise accounts payable-trade, advances received and other liabilities. The decrease resulted from short-term intercompany clearing accounts.

5. *Others* comprise accounts payable for wages and salaries, social service institutions, deferred interest, sales on behalf and on account of third parties, vacation arrears, as well as miscellaneous short-term liabilities.

Liabilities are carried at the amounts at which they are payable except for higher DM carrying values resulting from foreign currency translations which have not been changed.

Contingent liabilities

Liabilities from the issue and endorsement of bills decreased by about DM 53 million.

Liabilities from guarantees were lower by DM 63 million compared to the previous year. Guarantees granted have been entered into mainly on behalf of affiliated companies.

Liabilities from warranties relate exclusively to guarantees given for loans of BASF Group companies.

Contingent liabilities not shown in the balance sheet, including collateral given for own liabilities, consist of

	1980 DM	1979 million DM
Securities pledged to BASF		
Employees' Health Insurance, nominal value	12,000,000	7.7
Assignment of accounts receivable from the construction of plants for third parties as collateral to notes payable	10,119,000	25.2
Unpaid stock subscriptions not yet called	3,871,156	4.1

In addition, at the date of the balance sheet, contingent liabilities and commitments existed resulting from the provisions of Regulation No. 8 (pensions) of the Allied High Commission Law No. 35, as well as from legal liabilities according to § 322, section 1, AktG (corporation law) due to the integration of Wintershall AG and according to § 327, section 4, AktG (corporation law) due to the temporary integration of Herbol-Werke Herbig-Haarhaus AG. In connection with the assumption of loans or commitments from leases taken by U.S. affiliates, we offered to secure sufficient capital or to fulfill the contractual obligations of these companies.

Total remuneration of the members of the Board of Executive Directors according to § 160 (3) No. 8 AktG (corporation law) amounted to DM 6,369,431 for the fiscal year 1980.

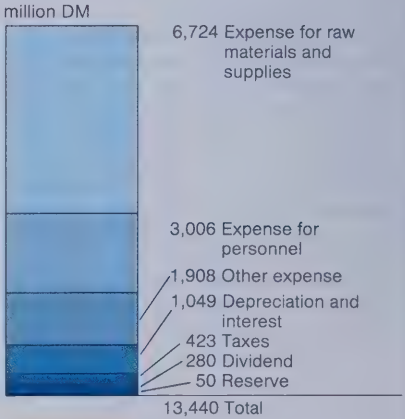
Total remuneration of the former members of the Board of Executive Directors and their surviving dependents, including, in accordance with Regulation No. 8 (pensions) of the Allied High Commission Law No. 35, pensions and payments payable to former members and surviving dependents of the Board of Executive Directors of IG Farbenindustrie Aktiengesellschaft, amounted to DM 3,249,518 for 1980.

Total remuneration of the Supervisory Board amounted to DM 860,000 (exclusive of turnover tax).

BASF AKTIENGESELLSCHAFT
SALES AND
PRE-TAX EARNINGS



BASF AKTIENGESELLSCHAFT
APPLICATION OF TOTAL
REVENUE¹ IN 1980



¹ = sales + other revenue

STATEMENT OF INCOME

1.—6. Sales were 2.9 percent higher than last year, the total, the aggregate performance, 0.8 percent. *Costs of raw materials, supplies and purchased merchandise* increased 5.3 percent, the *balance (gross profit)* decreased 3.8 percent.

7. *Income from profit transfer agreements* results primarily from Rheinische Olefinwerke GmbH, Wes-seling.

8. *Income from affiliates* relates principally to dividends paid by Wintershall AG, Celle/Kassel (DM 117.2 million), BASF Farben + Fasern AG, Hamburg (DM 35.9 million), Elastogran GmbH, Lemförde (DM 18.8 million), BASF-Chemiewerte Aktiengesellschaft, Zurich (DM 12.3 million), BASF Antwerpen N. V., Antwerp (DM 10.9 million), BASF Española S. A., Barcelona (DM 7.3 million), Knoll Aktiengesellschaft, Ludwigshafen (DM 6.0 million), BASF de México, S. A. de C. V., México (DM 3.4 million), Nordmark-Werke GmbH, Hamburg (DM 3.1 million), Ultraform GmbH, Ludwigshafen (DM 3.1 million), BASF Japan Ltd., Tokyo (DM 2.9 million).

The income from the German affiliates includes the respectively allocatable corporation tax in the amount of DM 66.8 million.

11. *Gains from sale of plant property and equipment and valuation adjustments* essentially comprise gains from the sale of affiliates and gains of exchange resulting from capital decreases by affiliated companies.

13. *Reversal of accruals* mainly results from the reduction of accruals for business, legal and tax risks.

14. *Transfers from special reserves* primarily relate to the reversal of accruals for price increases due to expiration of time, reduced by adjustments for tax purposes.

15. *Other income* includes principally revenue items not directly related to operations, transfers of taxes in accordance with profit transfer agreements, gains of exchange, government subsidies received for expenditures in research and development in 1979, investments in areas bordering on the German Democratic Republic, for cer-

tain energy-saving investments and the reduction of reserves no longer required for accounts receivable.

16. *Wages and salaries* increased by DM 98.0 million.

17. *Compulsory social security contributions* rose by DM 17.5 million.

18. *Expenses for pensions and assistance* relate principally to current pension payments, contributions to the BASF Employees' Pension Fund, a contribution to BASF-Altershilfe GmbH, and accruals for pension obligations; they were lower by DM 39.8 million compared to the preceding year.

19.—20. *Depreciation of tangible fixed assets and write-downs and valuation adjustments on investments* have been explained in the notes to fixed assets.

21. *Valuation adjustments on current assets other than inventories and general reserves for accounts receivable* apply primarily to uncollectable and doubtful accounts receivable and to provisions for hedging costs.

22. *Losses on retirement of fixed assets* are mainly attributable to scrapping of plant and equipment due to technical developments and the sale of affiliated companies.

24. a) *Taxes on income and property* comprise DM 67 million assumed from Group companies and DM 54 million taxes on property and similar taxes as well as taxes for previous years adjusted for the gain realized in the reduction of accruals and refunds of similar taxes paid in earlier years.

24. b) The *other taxes* consist primarily of oil and automobile taxes.

26. *Transfer of losses of affiliates* relates almost exclusively to LUWOG Wohnungsunternehmen GmbH, Ludwigshafen.

28. *Other expenses* include primarily costs of services and repairs performed by outside contractors, shipping and freight charges, rents and leases, license fees, agency expenses, advertising expenses, bank charges, insurance premiums, fees, contributions, etc., costs of transactions not directly related to operations, contributions to BASF Wyandotte Corporation, Parsippany, and BASF Vene-

zolana S. A., Caracas, in the amount of DM 137.8 million as well as the formation of accruals for risks that have to be carried under this item.

29.—32. From the *net income* DM 50,000,000 were transferred to the free reserve, leaving a *profit available for dividend* of DM 279,724,203.

We propose to distribute from such a profit a dividend of DM 7.00 per share of the nominal value of DM 50. The shareholders, domiciled in the Federal Republic, entitled to dividend receive in addition a tax credit of DM 3.94. If the proposal is accepted, the dividend payable in the year under review on stock fully entitled to dividend of DM 1,997,970,850 will be DM 279,715,919 leaving an undistributed profit of DM 8,284.

We propose that the undistributed amount be carried forward.

Ludwigshafen, April 7, 1981

The Board of Executive Directors

Report of the Supervisory Board

During the period under review we have maintained constant surveillance over the management of the company's affairs by reviewing the written and verbal reports of the Board of Executive Directors. In addition, we met six times with the Board.

We have examined the Financial Statements, the Annual Report of BASF Aktiengesellschaft and the proposal for the appropriation of net income. The Financial Statements, including the books and the Annual Report of BASF Aktiengesellschaft have been examined by Schitag Schwäbische Treuhand-Aktiengesellschaft, the auditors appointed by the Annual Meeting, and have been given an unqualified opinion. Having concluded our own examination we concur with the auditors and see no grounds for objections.

The Financial Statements and the Annual Report of BASF Aktiengesellschaft and Consolidated German Subsidiaries as well as the report of the auditors who expressed an unqualified opinion have been brought to our attention.

We have approved the Financial Statements of the company drawn up by the Board of Executive Directors, which is thus final, and concur with the proposal of the Board of Executive Directors regarding the appropriation of net income.

Ludwigshafen, April 28, 1981

The Supervisory Board

Supervisory Board

Prof. Dr. phil. nat. Bernhard Timm,
Heidelberg
Chairman

Werner Vitt, Isernhagen
Deputy Chairman
Deputy Chairman of the Industriegewerkschaft
Chemie-Papier-Keramik (Chemical, Paper and
Ceramics Industries Union)

Dr. rer. nat. Wolfgang Arend,
Ludwigshafen
Chairman of the Board of Spokesmen
of the Management Employees
of BASF Aktiengesellschaft

Dr. jur. Robert Ehret,
Frankfurt/Main
Member of the Board of Executive
Directors of Deutsche Bank AG

Prof. Dr. rer. nat. Manfred Eigen,
Goettingen
Director, Max Planck Institute
for Biophysical Chemistry in Goettingen

Prof. Dr.-Ing. Berthold Frank,
Heidelberg

Dr. rer. pol. Johan M. Goudswaard,
Wassenaar, Netherlands
Deputy Chairman of the
Executive Council of Unilever N. V.

Dr. jur. Wolfgang Heintzeler, Heidelberg

Kurt Herrmann, Carlsberg/Palatinate
Member of the Works Council
of the Ludwigshafen Works
of BASF Aktiengesellschaft

Dr. rer. pol. Kurt Hohenemser,
Dreieich-Dreieichenhain
Member of the Board of Executive Directors of
Deutsche Schutzvereinigung für Wertpapier-
besitz e.V. (Registered German Association for
the Protection of Owners of Securities)

Dr. jur. Robert Holzach,
Zumikon, Switzerland
Chairman of the Board of Schweizerische
Bankgesellschaft (Union Bank of Switzerland)

Christoph von Knorre, Ludwigshafen

Roland Koch, Ludwigshafen
Member of the Works Council
of the Ludwigshafen Works
of BASF Aktiengesellschaft

Herbert Krug, Ludwigshafen

Dr. rer. nat. Hans Joachim Langmann,
Jugenheim/Bergstraße
Chairman of the Partners' Council
and the Board of Executive Directors of E. Merck

Prof. Dr. phil. h. c. Hans L. Merkle,
Stuttgart
Chairman of the Board of Executive
Directors of Robert Bosch GmbH

Heinz-Werner Meyer, Dortmund
Member of the Board of Directors of the
Industriegewerkschaft Bergbau und Energie
(Mining and Energy Industries Union)

Wilhelm Roßmüller, Marl
Chairman of the Works Council of
Gewerkschaft Auguste Victoria 1/2

Willi Schüler, Heringen
Chairman of the Works Councils of
Kali und Salz AG

Rudolf Woll, Mainz
Director of the Rhineland-Palatinate-Saar
Region of Deutsche Angestellten-Gewerkschaft
(German Salaried Employees Union)

Board of Executive Directors

Prof. Dr. rer. nat. Matthias Seefelder
Chairman

Dr. rer. nat. Hans Moell
Deputy Chairman

Dr. rer. nat. Hans Albers

Dr. rer. pol. Ernst Denzel

Dr.-Ing. Detlef Dibbern
as of August 1, 1980

Dr. rer. nat. Helmut Dörfel
as of August 1, 1980

Dr.-Ing. Erich Henkel

Dr. rer. nat. Wolfgang Jentzsch

Prof. Dr.-Ing. Horst Pommer

Dr. rer. pol. Ronaldo Schmitz
as of August 1, 1980

Prof. Dr.-Ing. Karl-August Wetjen

Dr. rer. nat. Herbert Willersinn

Hans Joachim Witt

BASF Group Managing Directors

Dr. rer. nat. Hans Albers
North America

Prof. Dr. rer. nat. Ernst Biekert
Pharmaceuticals

Dr.-Ing. Günter Bogenstätter
Technical Development

Gaston Borgoltz
France

Hans Brühwiler
Europe 3

Dr. jur. Klaus Cantzler
Europe 2

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Textile Chemicals

Dr. rer. nat. Hans Detzer
Central Planning

Rudolf Dütemeyer
Spain

Dr. rer. nat. Albrecht Eckell
Research/Plastics

Peter Eisenlohr
Personnel

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BASF Antwerp

Christian Erasmí
Africa, West Asia

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Research/Basic Chemicals

Günter Grochla
Japan

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Fiber Raw Materials

Dr. rer. nat. Erwin Hahn
Research/Dyestuffs

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Semi-finished and Finished Parts

Dr. rer. nat. Heinz Hohenschutz
Intermediates

Dr. rer. nat. Wolfgang Jentzsch
BASF Ludwigshafen

Dr. rer. pol. Heinrich Jonas
Financial Statements

Dr. jur. Jürgen-Friedrich Kammer
Finance

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Basic Chemicals

Dr. rer. nat. Hans-Harald Kopper
Fibers

Dr.-Ing. Wolfgang Kost
Controlling

Dr. rer. nat. Heinrich Laib
Dispersions

Dipl.-Ing. Otto Landhäußer
Energy and Coal

Dr. rer. nat. Hans Lautenschlager
Brazil

Dipl.-Ing. Theo Marré
Engineering and Construction/
BASF Ludwigshafen

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Europe 1

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Crop Protection

Dr. rer. nat. Manfred Minsinger
Reaction Plastics

Dr. oec. publ. Ernst Mühling
Logistics and Distribution

Karl Münch
Pigments and Auxiliaries

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Engineering

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Coatings and Paints

Dr. rer. nat. Hans Georg Peine
Environmental Protection and Safety

Dr. rer. nat. Heinz Pohlemann
Engineering Plastics

Prof. Dr. rer. nat. Werner Reif
Research/Main Laboratory

Dipl.-Ing. Gottfried Richter
Project Engineering and Construction

Wolfgang Ritter
Legal Affairs, Taxes and Insurance

Dr. rer. nat. Norbert Rudolphi
Industrial Chemicals

Frohdhin Schuster
Latin America

Wolfgang Schwer
Purchasing/Raw Materials

Dr. rer. nat. Dieter Stein
Personnel

Dr. rer. nat. Walter Stilz
Research/New Areas

Dr. rer. nat. Hans-Jürgen Sturm
Nutrition

Dr. rer. nat. Helmut Thurn
Information Systems

Dr. rer. pol. Karl-Heinz Tillmann
Fertilizers

Dr. agr. Otto Walterspiel
Potash and Salts

Dipl.-Kfm. Robert H. Weber
Accounting and Information Technology

Dr. rer. nat. Gernot Winter
Polyolefins and PVC

Heinz Wüstefeld
Oil and Gas

Dr. rer. pol. Robert Zinser
South and East Asia, Australia

BASF Aktiengesellschaft

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Dr. rer. nat. Max Appl
Dipl.-Kfm. Claus Baumann
Dr. rer. nat. Hans Baumann
Edgar Beck
Günter Becker
Dipl.-Ing. Klaus Becker
Lutz Beckers
Heinz Günter Beermann
Bernt Berghäuser
Eberhard Bergmann
Dr. rer. pol. Günter Bock
Dr. rer. nat. Erhard Borchers
Dr. rer. nat. Fritz Brunnmüller
Dr. rer. nat. Siegfried Buchholz
Dr. rer. nat. Oskar Büchner
Dr. rer. nat. Karl Burger
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Dr. rer. nat. Hans Dörries
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Dr. rer. nat. Hans Gropper
Dr. rer. nat. Otto-A. Grosskinsky
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Dr. rer. nat. Franz Haaf
Dr. rer. nat. Manfred Häberle
Dipl.-Kfm. Dietrich von Hanstein
Bernhard Hardekopf
Dr. rer. nat. Peter Haug
Dr.-Ing. Heinz Hauser
Prof. Dr.-Ing. Manfred Heckle
Dr. rer. nat. Dieter Heinze
Dr. rer. nat. Konrad Hengst
Dr. rer. nat. Otto Hertel
Dr. phil. nat. Herwig Hoffmann
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Joachim Holstein
Dr. rer. nat. Paul Hornberger

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Dipl.-Ing. Karl Kehrer
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Dr. oec. publ. Hubert Kinader
Dr. rer. nat. Klaus Kinkel
Helmut Klamm
Max Dietrich Kley
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Dr. rer. nat. Karl-Heinz König
Dipl.-Chem. Alwin Konrad
Hans-Jakob Krämer
Dipl.-Kfm. Paul Krautheimer
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Dr.-Ing. Hanns-Günter Krüger
Dr. rer. nat. Joachim Kunde
Dr. rer. nat. Dietrich Lausberg
Dr. oec. Hans-Karl Lobenwein
Friedrich Löffler
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Dipl.-Volksw. Helmuth Maier
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Horst Meyer
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Hans Mutzenbecher
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Dr. rer. nat. Hans Otterbach
Dr. rer. nat. Martin Pape
Dr. rer. pol. Walter Paul
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Dr. rer. nat. Ernst Raber
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Dr. rer. pol. Anny Reichl
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Dr. rer. nat. Manfred Reinmüller
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Dr. rer. nat. Wilhelm Rittinger
Dr. rer. nat. Peter Roder
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Georg Rothaupt
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Dipl.-Kfm. Wolfram Scheerbaum
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Heinz Schlüter
Günter Schönrock
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Dr. rer. nat. Hanns-Helge Stechl
Dipl.-Landw. Klaus von Stetten
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Dr. rer. nat. Erich Stöckl
Hans-Werner von Stutterheim
Dr. rer. nat. Hubert Suter
Dr. phil. Johann Swoboda
Günter Taege
Prof. Dr. med. Alfred Thiess
Hubertus von Tobien
Dr.-Ing. Karl Uhl
Hans-Jochen Versemann
Dr. rer. nat. Heinz Völker
Dr. rer. nat. Ulrich Wagner
Dr. rer. nat. Dietmar Werner
Dr. rer. nat. Hermann Weißlau
Dr. rer. nat. Kurt Wick
Dipl.-Ing. Markus Willinger
Dipl.-Kfm. Gerhard Wolf
Dipl.-Volksw. Hinrich Würdemann
Dr. rer. nat. Albrecht Würz
Dr. rer. nat. Rolf Wurmb
Hubert Wydra
Dr. med. Heinrich Zeller
Erich Zepp
Paul Werner Zumbruch

As of December 31, 1980

BASF Group Ten-Year Summary

MILLION DM	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
SALES AND EARNINGS										
Net sales	10,233	11,861	14,258	19,736	18,081	20,983	21,150	21,513	25,896	27,731
Income before income taxes and minority interests	520	724	1,053	1,338	849	1,406	1,109	1,149	1,703	1,271
Income taxes	232	312	516	801	489	790	696	718	1,067	891
Minority interests in income	1	4	23	18	(15)	9	25	10	17	21
Net income	287	408	514	519	375	607	388	421	619	359
ASSETS										
Property, plant and equipment	5,890	6,114	6,191	6,441	6,652	6,923	7,181	7,597	7,679	7,724
Patents, trademarks, franchises	49	46	53	23	15	10	29	30	16	102
Investments	785	801	708	695	763	828	848	708	817	683
FIXED ASSETS	6,724	6,961	6,952	7,159	7,430	7,761	8,058	8,335	8,512	8,509
Inventories, uncompleted contracts and goods on lease	1,724	1,800	1,947	3,206	3,041	3,420	3,453	3,274	3,906	4,603
Notes and accounts receivable	1,928	2,496	2,772	2,910	3,095	3,070	2,996	3,364	3,909	4,234
Cash and cash items	709	774	958	967	930	944	624	708	863	670
CURRENT ASSETS	4,361	5,070	5,677	7,083	7,066	7,434	7,073	7,346	8,678	9,507
Deferred charges and prepaid expenses	209	250	233	280	243	289	212	188	203	266
Balance arising from consolidation	207	237	233	116	161	44	19	—	—	—
TOTAL	11,501	12,518	13,095	14,638	14,900	15,528	15,362	15,869	17,393	18,282
CAPITAL AND LIABILITIES										
Capital stock of BASF Aktiengesellschaft	1,513	1,526	1,541	1,641	1,723	1,768	1,914	1,939	1,971	1,998
Paid-in surplus	1,332	1,360	1,385	1,368	1,368	1,466	1,704	1,747	1,804	1,844
Earned surplus	769	983	1,272	1,563	1,657	2,267	2,385	2,578	2,965	3,019
EQUITY OF BASF GROUP	3,614	3,869	4,198	4,572	4,748	5,501	6,003	6,264	6,740	6,861
Balance arising from consolidation	—	—	—	—	—	—	—	6	10	45
Minority interests	79	153	156	136	133	131	143	132	131	132
Special reserves	57	62	179	387	414	430	386	422	720	698
Unrealized gain on foreign exchange	108	120	252	288	226	*	*	*	*	*
Long-term reserves (due after one year)	641	939	1,049	1,671	1,946	2,156	2,362	2,454	2,857	3,214
Long-term liabilities (due after one year)	4,357	4,262	3,562	3,201	3,042	2,615	2,401	2,144	1,877	1,928
Current liabilities, accruals and deferred income	2,645	3,113	3,699	4,383	4,391	4,695	4,067	4,447	5,058	5,404
LIABILITIES	7,643	8,314	8,310	9,255	9,379	9,466	8,830	9,045	9,792	10,546
TOTAL	11,501	12,518	13,095	14,638	14,900	15,528	15,362	15,869	17,393	18,282
CAPITAL EXPENDITURES AND DEPRECIATION										
Expenditure on property, plant and equipment	922	915	1,170	1,394	1,396	1,541	1,655	1,757	1,811	1,841
Depreciation of property, plant and equipment	895	996	1,089	1,218	1,190	1,225	1,336	1,451	1,628	1,592
NUMBER OF EMPLOYEES	93,022	104,054	107,539	110,989	111,445	112,686	113,798	115,408	117,168	116,518

* The foreign currency translation method was changed in 1976. Since then, gains and losses on foreign currency are directly charged or credited to income of the respective period.

BASF Aktiengesellschaft

Ten-Year Summary

million DM	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
SALES AND EARNINGS										
Sales	5,200	5,921	6,905	10,157	8,394	9,798	9,632	9,680	12,134	12,491
Income before taxes	448	618	703	896	557	823	677	678	994	744
Taxes ³	219	341	402	537	284	467	396	407	589	414
Net income	229	277	301	359	273	356	281	271	405	330
ASSETS										
Tangible and intangible fixed assets	2,390	2,270	2,373	2,559	2,608	2,736	2,941	3,143	3,226	3,255
Investments	2,028	2,421	2,524	2,503	2,713	2,733	2,767	2,815	2,826	2,904
FIXED ASSETS¹	4,418	4,691	4,897	5,062	5,321	5,469	5,708	5,958	6,052	6,159
Inventories, uncompleted contracts and products on lease	860	818	861	1,365	1,212	1,380	1,325	1,272	1,674	1,804
Receivables and other current assets ¹	1,270	1,156	1,528	1,727	1,481	1,398	1,356	1,447	1,846	1,939
Cash and cash items ²	569	599	686	678	413	456	368	345	585	340
CURRENT ASSETS (including deferred charges and prepaid expenses)	2,699	2,573	3,075	3,770	3,106	3,234	3,049	3,064	4,105	4,083
TOTAL	7,117	7,264	7,972	8,832	8,427	8,703	8,757	9,022	10,157	10,242
CAPITAL AND LIABILITIES										
Capital stock	1,513	1,526	1,541	1,641	1,723	1,768	1,914	1,939	1,971	1,998
Reserves and profit brought forward	1,799	1,825	1,901	1,905	1,985	2,123	2,418	2,509	2,607	2,736
Transfer to reserves	—	50	55	80	40	55	50	40	90	50
Dividend	227	229	246	279	233	301	230	233	315	280
EQUITY CAPITAL	3,539	3,630	3,743	3,905	3,981	4,247	4,612	4,721	4,983	5,064
SPECIAL RESERVES	24	22	56	172	192	200	204	216	275	219
Accruals	608	799	872	1,481	1,554	1,695	1,599	1,686	1,959	2,106
Liabilities for a term of at least four years	2,172	1,952	1,712	1,291	1,238	923	828	735	659	684
Other liabilities	774	861	1,589	1,983	1,462	1,638	1,514	1,664	2,281	2,169
TOTAL LIABILITIES	3,554	3,612	4,173	4,755	4,254	4,256	3,941	4,085	4,899	4,959
TOTAL	7,117	7,264	7,972	8,832	8,427	8,703	8,757	9,022	10,157	10,242
CAPITAL EXPENDITURES, DEPRECIATION AND RETIREMENTS										
Expenditures on tangible fixed assets	315	385	620	784	625	691	833	884	887	811
Depreciation and retirements of tangible fixed assets	525	505	517	597	576	563	629	681	804	782
NUMBER OF EMPLOYEES	49,590	50,464	52,230	54,065	52,707	52,962	52,932	52,318	52,515	52,312

¹ After valuation adjustments

² Since 1976 without notes receivable

³ Taxes on income and property, including equalization of burdens property levy

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